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INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

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The International Economic Development Council (IEDC) is the premier international association dedicated to leadership and excellence in economic development. IEDC can equip you with the tools and resources that are helping to shape economic development throughout the country and around the world. Our services include:

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JoAnn Crary, CEcD
IEDC Chair

LETTER FROM THE CHAIR

dear colleague

As I reflect on this year and my time so far as Chair of the Board of the International Economic Development Council (IEDC), I am filled with pride because of what we have accomplished together. I would like to thank the Board of Directors, the Governance Committee, the IEDC staff, and our members for their support. Because of all of you, we have pushed forward and made progress on a variety of initiatives that promise to enhance our ability to be more effective in promoting economic well-being and quality of life in the communities in which we work.

When I was elected Chair, I outlined three initiatives that I wanted to direct our efforts toward in 2015. These were: workforce development and ensuring economic opportunity; leadership development; and economic development research.

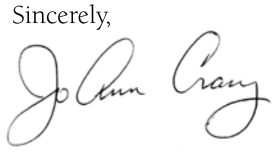
It is too often that we hear stories about people in search of dignified work who are sitting on the sidelines due to lack of education or other barriers to employment. To deepen our understanding of inclusive economic development, IEDC has initiated a Task Force on Equity and Economic Opportunity. Research findings by the Taskforce and other best practices of ensuring economic opportunity are now being presented through our conferences and webinars. I'm also pleased that this topic has also been adopted by the Economic Development Research Partners (EDRP) as a top priority for 2016 research. We appreciate your enthusiastic interest in this topic, and I appreciate you accepting this new role as economic developers in helping to ensure that more people contribute to and feel part of a successful community.

As started under Bill Sproull's Chairmanship, IEDC has continued to focus on leadership development, especially of our young professionals. IEDC continues to provide opportunities for young professionals to actively participate and learn at our conferences. And recognizing that diversity in gender, age, ethnicity, and opinion will make us a stronger organization, EDRP published "Widening the Circle: Engaging a Young and Diverse Workforce in Economic Development" to help us build strong future leaders in the profession.

IEDC has continued to provide in-depth research on pertinent economic development topics through our research and in collaboration with other thought leaders. For example, EDRP, with the support and collaboration with JPMorgan Chase, produced a new training course on foreign direct investment and exports. We continue to enhance our disaster recovery knowledge in collaboration with the National Association of Development Organizations Research Foundation. In addition, IEDC and University Economic Development Association are offering a workshop at the 2015 Annual Conference in order to build our knowledge on how economic developers and institutes of higher education can work together. Through all of these activities, IEDC continues to cement itself as a go-to source for economic development research.

I look forward to seeing you at our Annual Conference in Anchorage.

Sincerely,



JoAnn Crary, CEcD
IEDC Chair

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when three equals one

By Janet Hammer, PhD

The "triple bottom line" refers to the economic, environmental, and social value of an investment. The term was coined by business consultant John Elkington to describe important investment value that accrues outside a firm's financial bottom line. The concept is increasingly salient in the worlds of business, investment, development, and governance and is sometimes referred to as "people, planet, profit" or sustainability. In this article, we introduce the triple bottom line concept and its relevance to economic development, and explore what it might look like in practice.

> The triple bottom line concept is central to economic development. Most communities have visions and goals that include economic prosperity, environmental quality, healthy people and livability. Not only should economic development be conducted in ways that take us toward rather than away from those goals, it turns out that those very factors are important for fostering economic development.

THE TRIPLE BOTTOM LINE CONCEPT

Traditionally, if a cost or benefit did not appear as a financial transaction it did not appear on the books and, thus, was not accounted for. Over time, however, there has been a growing realization that important investment value may not appear in the financial bottom line yet should be accounted for. These extra-financial returns may be economic, social, or environmental and are referred to as the triple bottom line or TBL.

This realization has prompted organizations in public, private, and non-profit settings to seek ways to consider triple bottom line performance of investments (see Sidebar One). For example, businesses may report on environment, society, and governance using the Global Reporting Initiative framework or may become a certified B corporation. Infrastructure investments may use the Envision framework to consider sustainability impacts. In real estate, developments may look to LEED, EcoDistricts, or other standards to improve and communicate environmental or triple bottom line performance. Cities may use the STAR Community Rating System to identify areas for improvement and document achievement.

Motivations for addressing triple bottom line performance vary depending upon context. In some settings the driver might be demands for better accountability and transparency, stronger investment performance, or alignment with organizational and stakeholder goals. In others, it may be an interest in brand or reputation management, cost savings, competitive advantage, innovation opportunity, or risk minimization. Whatever the driver, the concept has arrived. Conversations that centered on "is this important" have given way to "how can we best address this?" For example, in the corporate world, the number of S&P 500 Index companies publishing corporate sustainability reports grew from under 20 percent in 2011 to 75 percent in 2014.

Janet Hammer led the development of the US Economic Development Administration's Triple Bottom Line Tool (tbltool.org). She is a Senior Fellow at Portland State University and founder of The Collaboratory – a consultancy that helps organizations achieve, assess, and communicate triple bottom line impact of development (janet@gocollaboratory.org).

Acknowledgments
The author thanks the communities that shared their case stories as well as colleagues that contributed to development of the TBL Tool and cases including **Julia Babcock, Ira Goldstein, Briana Meier, Maggie McCullough, Kelly Moosbrugger,** and **Gary Pivo**. The research that informed this article was funded by US Economic Development Administration Technical Award Number 99-07-13871. This article is the sole responsibility of the author and does not imply endorsement by these individuals or their organizations.

TRIPLE BOTTOM LINE ECONOMIC DEVELOPMENT

Economic development succeeds at the interface of people, place, and prosperity. Sometimes referred to as the triple bottom line, this concept recognizes the interconnections between economic, environmental, and social factors and provides an important framework for engaging in economic development. This article introduces the concept of triple bottom line economic development, discusses its centrality to the profession, and provides examples of what it might look like in practice.

THE TRIPLE BOTTOM LINE CONCEPT AND ECONOMIC DEVELOPMENT

The triple bottom line concept is central to economic development. Most communities have visions and goals that include economic prosperity, environmental quality, healthy people and livability. Not only should economic development be conducted in ways that take us toward rather than away from those goals, it turns out that those very factors are important for fostering economic development. That is, economic development succeeds at the interface of people, place, and prosperity:

- *People* are at the heart of economic and community development. People provide the talent and labor that enables economies to thrive, and they are the main reason we engage in economic development and cultivate prosperity.
- *Place* is where development happens, even in the context of an interconnected world. Placemaking helps attract and retain workers and visitors, and stewardship of place maintains the resource base upon which life and economies depend.
- *Prosperity* contributes to well-being and quality of life. New accounting metrics provide a more complete picture of investment value so that business and community ledgers balance in the short term and the long term.

Together, these 3Ps – the triple bottom line of people, place, and prosperity – are both the ingredients and outcomes to successful economic development.

Let's consider the following thought experiment to see some of the concepts in play. Imagine there are two scenarios for a mixed-use development project:

SIDEBAR ONE
APPLYING TBL TOOLS TO ED

As the triple bottom line and sustainability have grown in importance, a profusion of tools and terms have been created to bring the concept to life. They have been developed for a range of scales or foci including business, built environment, infrastructure, and investment. The following highlights some of the most important of these terms and tools and then discusses their relevance to economic developers.

Business and Investment – Corporate social responsibility (CSR) is a term that refers to how a business conducts itself, particularly with respect to environment, society, and governance issues (ESG) or sustainability. An increasing number of companies issue CSR reports to communicate how they are addressing ESG or sustainability factors. For example:

- The Global Reporting Initiative (GRI) is an international organization that has developed standards for CSR reporting. GRI does not certify reports, companies, or performance; GRI helps organizations know what to report.
- The Sustainability Accounting Standards Board (SASB) is developing standards for the disclosure of material sustainability information for more than 80 industries in 10 sectors for mandatory SEC filings such as the Form 10-K and 20-F. As with GRI, SASB provides guidance on what to report but does not certify or endorse performance.
- Businesses may register as a benefit corporation (B Corp) in a state that provides such legal recognition[1] and/or become a certified B corporation – a status available to businesses in all 50 states and around the world that achieve a verified minimum score on the B Impact Assessment third party standard governed by the non-profit B Lab. Companies that have completed the B Impact Assessment may choose to participate in the Global Impact Investment Rating System (GIIRS) that provides investors a rating of a company's social and environmental impact.

Built Environment and Municipal Sustainability – There are a number of tools that provide information about the TBL or sustainability performance in the built environment. Major programs that focus on the building, neighborhood or district level include LEED, Green Globes, Living Building Challenge, and EcoDistricts. Sustainable Sites considers the landscape context for building and Envision considers infrastructure. The STAR Community Rating System provides a framework and certification for local jurisdictions to document and improve social, economic, and environmental performance.

Relevance and Application – Economic development professionals can make use of these standards and certifications in a number of ways.

- First, economic developers can help businesses learn about and adopt reporting and certification initiatives that can help the business improve performance, increase competitiveness, or attract capital.
- Second, economic developers can encourage or incentivize applicants for funding or approval to participate in reporting or certification programs. This helps raise the bar and shift practice toward stronger TBL performance.
- Third, economic developers can encourage officials to prioritize purchases from triple bottom line businesses and to consider whether the organization's investments are in funds or community development financial institutions with strong reporting or certification.

Together, these strategies support businesses that are striving to achieve positive social and environmental impact along with financial returns and stimulate demand for other businesses to do so. Economic developers can also work with their community to employ sustainability indicators such as STAR Community Index in order to identify opportunities for improvement and to market the community's sustainability commitment to prospective businesses and residents.

Focus of Assessment	Example
Business	Global Impact Investment Rating System (GIIRS)
Building	Leadership In Energy & Environmental Design (LEED)
Infrastructure	Envision Sustainable Infrastructure Rating System
Neighborhood	LEED For Neighborhood Development
City	Sustainability Tools For Assessing & Rating Communities (STARS)
Investment Opportunity	The Triple Bottom Line Tool (TBL Tool)

* Note that investment opportunity may include infrastructure, business, real estate development, etc.

Scenario One: Profit of $1.3 m
Existing residents are displaced and now face higher rents, longer commutes, and loss of community ties. A grove of trees that holds symbolic value to the community is removed. The majority of jobs created are low wage with little opportunity for advancement, and building practices that cut costs in the short term yield higher energy use over the life of the building and lower environmental quality for occupants – resulting in more illness such as asthma and lower worker satisfaction and productivity.

Scenario Two: Profit of $1 m
Existing residents are provided with opportunities for affordable homeownership and rental. The grove is incorporated into the design, providing enjoyment to residents and attracting customers. "Green" building technologies save energy and keep dollars flowing in the local economy while also improving occupant satisfaction and productivity. Project construction included career development opportunities for under-represented populations, and commercial tenants provide wage and benefit packages that support families and enhance the community through better tax revenues and reduced need for community services.

When considering the financial bottom line, Project One appears to be the winner; evaluating the triple bottom line, Project Two comes out on top. The triple bottom line approach more fully captures the value of an investment, helping ensure that resources are used as efficiently and effectively as possible.

TBL ECONOMIC DEVELOPMENT IN PRACTICE

A core function of the economic developer is to understand the economic development opportunities of the community – the strengths to build upon and weaknesses to shore up – and to work with appropriate partners to address these strengths and weaknesses. Triple bottom line economic development does this in ways that contribute to people, place and prosperity.

A core function of the economic developer is to understand the economic development opportunities of the community – the strengths to build upon and weaknesses to shore up – and to work with appropriate partners to address these strengths and weaknesses. Triple bottom line economic development does this in ways that contribute to people, place and prosperity.

How would you do this? Just like there is no singular way to do economic development, there is not one way to do triple bottom line economic development. Whether you are engaged in development of infrastructure and amenities, workforce development, business assistance, cluster development, or access to land and buildings – the main thing is to see economic development, resource stewardship, and human well-being as interconnected issues and to address them systemically and collaboratively.

There are two primary ways that development investment can yield triple bottom line impact. It may be that one specific action simultaneously affects all three bottom lines. For example, a "green" approach to building can benefit the *environmental* bottom line (reduce energy use and non-toxic materials), the *social* bottom line (increase health and occupant satisfaction) and the *economic* bottom line (reduce energy bills and potentially yield higher building value and better employee productivity and retention). On the other hand, it may be that a group of actions together bring triple bottom line results. For example, a TBL approach to a road investment might include green design features that reduce flooding, protect habitat, and reduce heat effects; multi-modal features that expand options for environmentally-friendly and active transportation choices; and job access and advancement opportunities that provide career pathways for marginalized populations. Together, these actions yield a number of economic, environmental, and social benefits. Whichever the approach – a singular action that achieves triple impact or combined actions that add value – the point is to consider whether and how economic development supports economic, environmental, and social performance.

As part of a project for the US Economic Development Administration (EDA), examples of TBL approaches to economic development were sought in order to see what that might look like in practice and identify lessons learned. We examined 18 cases in rural, urban, and suburban communities across the US and found that communities have woven social, environmental, and economic elements into their economic development efforts in various ways.[2] For example:

- A mixed-use development in Iowa incorporated environmental remediation and restoration while bringing jobs and vitality to a distressed area and providing cultural amenities and recreation opportunities.
- A rural economic development effort in Appalachia preserved unique regional assets by focusing on networks, innovation, and systems approaches to developing a cluster of food, artisan, and tourism businesses.
- A city in Texas maximized community benefit of incentives by articulating triple bottom line performance objectives and conditioning incentive payment on achievement of goals.

- Economic development plans in rural and urban communities across the US incorporated resource protection, livability, and pathways to opportunity.
- A building retrofit program in Oregon saves energy and dollars while creating living wage jobs and career opportunities for traditionally underserved populations.
- A maritime center in Washington catalyzed marine and tourism business, while protecting natural resources, preserving tradition, and creating a treasured community space.
- An employee-owned business cooperative in Ohio creates living wages jobs and equity ownership while saving natural resources and keeping dollars in the local economy.
- A resident-driven development in California reclaimed a distressed area with green features, cultural conservation, youth development, and job opportunities.

The projects we reviewed represent diverse types of communities and diverse types of economic development. They range from manufacturing to tourism, mixed-use development, energy retrofits, business development, and CEDS (see Sidebar Two for a more in depth look at one case). While each case is unique, key themes and lessons learned emerged.

Lessons learned from these cases include:

- Environmental aspects were woven into most of the projects demonstrating that it is financially feasible and even profitable to incorporate natural resource stewardship into development efforts.
- Inclusive engagement strategies responded to community priorities, and effective engagement was viewed as a strategy that yields better results not as a checkbox to be completed or hoop to jump through.
- Well-designed and executed programs helped ensure that development benefits accrued to diverse community members, including traditionally marginalized populations.
- Accountability mechanisms helped ensure that triple bottom line goals were met and that promises made were delivered upon. Accountability systems weren't punitive; rather, the process was structured to meet diverse interests and accommodate changing conditions.
- Targeted diversification – from funding sources to project or tenant portfolios – was important for managing uncertainty and promoting resilience. This strategy was seen in cases ranging from tourism to business assistance to mixed-use development.
- Whole system approaches increased project efficiency and effectiveness and reduced costs in the long run. This approach aims to more fully account for costs and benefits across the project life cycle, address the range of factors that influence project success, and support community priorities.

Triple bottom line economic development is different than economic growth. TBL economic development creates jobs and wealth in a community in ways that contribute to resource stewardship, economic vitality, and community well-being. It considers how investments contribute to quality of life, good governance, access to opportunity, environmental quality, healthy people, resilience and livability.

- The public sector played a vital role in creating the conditions necessary for private investment to flourish and for triple bottom line results to be achieved. Strategies included cost sharing, incentivizing preferred practice, education and training partnership, stakeholder convening, infrastructure investment, and regulation to protect health and safety.
- A TBL approach may require new trails to be blazed. This can be accomplished by taking reasonable risks while exercising caution, and bridging innovation with proven paths.

Along with the Casebook, a framework was created for the EDA initiative that helps organizations consider whether and how a project is configured for triple bottom line performance. The framework includes performance areas and measures for each of the three goals of economic vitality, natural resource stewardship, and community well-being (see sidebar). This Practitioner's Guide is available at http://tbltool.org/files/tbl_framework_practitioners_guide.pdf.

MOVING FORWARD

Fundamentally, the purpose of economic development is to improve well-being in a community by facilitating the creation and retention of jobs and wealth. Typically, we do this by cultivating conditions that are favorable for recruiting, starting, and growing businesses. As we do so, it is important to keep in mind the distinction between economic growth and economic development. Growth is an increase, development is an improvement. Growth in measures such as GDP can occur alongside increased poverty and may include goods and services associated with negative impacts (e.g., pollution remediation, crime enforcement, and cancer treatment appear as increases in GDP). Sometimes growth and development go together and sometimes they do not.

Triple bottom line economic development is different than economic growth. TBL economic development creates jobs and wealth in a community in ways that contribute to resource stewardship, economic vitality, and community well-being. It considers how investments contribute to quality of life, good governance, access to opportunity, environmental quality, healthy people, resilience and livability.

SIDEBAR TWO
A CASE OF TBL ECONOMIC DEVELOPMENT IN PRACTICE

While every case is unique, this example from an historic Victorian coastal community on the Olympic Peninsula helps illustrate triple bottom economic development in practice. The story takes place in Port Townsend, Washington, and begins with an underutilized beachfront property. Interest in preserving and enhancing the area's working marina had been perking for some time, but no action had been taken…until a site was slated for residential or hotel development that was out of character for the area and would have privatized beach access. That catalyzed a coalition of individuals and organizations and in 1987 the non-profit Northwest Maritime Center was created to bring an alternative to fruition.

The Northwest Maritime Center is a vibrant 27,000 square foot multipurpose facility that supports the community's marine and tourism business by providing space for boat building and storage, meetings and conferences, research and education, offices, retail, and community gatherings. Ground-breaking for the project took place in 2008, with portions of the facility completed and in use in 2009 and the grand opening held in Spring 2010. Triple bottom line aspects of the project include the following.

The Northwest Maritime Center in Port Townsend, Washington.

Photos courtesy of the Northwest Maritime Center.

The Northwest Maritime Center helps conserve important historic and economic traditions in the region, including wooden boat building.

- *Economic Vitality:* The project is having direct and indirect economic impact. Directly, the project accounts for approximately 16 FTE including staff of the Northwest Maritime Center, chandlery, and café, and approximately 30 summer staff. A commitment to local businesses has carried through from contracts with local woodworkers, artisans, and builders in the design and construction phase, to utilizing a local vendor that features local products in the café and to stocking locally made products in the chandlery – the West coast's foremost resource for "all things wooden boat." The Center is having indirect economic benefit as well. For example, events at the Center help maritime related businesses make sales and also contribute to the community's important tourism industry. "Off season" events have been added in order to increase impact, and courses are offered to youth and adults to open doors to maritime careers.
- *Natural Resource Stewardship:* Environmental restoration and protection was an important component of the project. Site clean-up was required to remedy contamination from its former use as a fuel storage terminal. When the new pier was constructed to accommodate larger historic vessels and public events, the award-winning design incorporated measures to protect important eelgrass habitat and minimize shadow effects that negatively impact migrating fish. Students from the community helped restore 3,000 square feet of eelgrass beds. The Center earned LEED Gold certification and purchases 100 percent of its power from Puget Sound Energy's "green power" program. Also, operating costs have been reduced by employing the latest technology in energy efficiency.
- *Community Well-Being:* Port Townsend's downtown waterfront district has Historic Landmark designation and the city is one of only three Victorian seaports in the nation. The community's historic and cultural resources are preserved and enhanced by both the Center's design and programming. Its location is easily accessible by multiple modes of travel including boat, foot, bicycle, bus, and automobile. The site includes public pier and beach access, as well as a public plaza. Public access is guaranteed in perpetuity. Traditional craft is on display both through the completed boats on site, as well as spaces to view boats being made. Community engagement was a priority, with multiple phases of focus groups and outreach to various stakeholders. Facility spaces are made available at a discounted rate to community and non-profit organizations. The Maritime Center partners with a number of organizations to deliver formal and non-formal educational programming from sailing to boat-making. For youth, abstract concepts come to life as teachers incorporate aspects of boating culture into classes – from the mathematics of navigation to physical education classes that expose children to the cultural landscape. The Puget Sound Explorer Discovery program brings every 7th grader in the city and county school districts out on the water.

The Center's festivals, workshops, and events contribute to a robust maritime and tourism economy.

There is not one way to do triple bottom line economic development, no magic formula. There are, however, strategies that support achievement of desired outcomes. Foremost among these is a systems approach that identifies synergies and accounts for true costs across the life cycle of a project. That and the need for effective partnership and collaboration were strong themes in the cases discussed above. Of course, collaboration is not new to economic development, however, there is a sense that the approach may be changing – for example, with new skills and attitudes regarding network development, stakeholder engagement, and multi-disciplinary teams. Moving forward, expect and plan for continuous improvement. Know that sometimes you have to go slow to go far. Go upstream, early and inclusively, to identify options and configure projects for strongest performance.

While "the bottom line" is used to refer to financial profit or loss, the phrase is also used to refer to the main point, the essence, the core. As in, "get to the bottom line." In economic development the triple bottom line is the bottom line. To succeed, economic development needs all three – people, place, and prosperity. Economic development exists in relation to people and planet. For economic development to succeed, triple bottom line performance is required. It's not an option or alternative way to do economic development. It is the essence and core; the bottom line.

While "the bottom line" is used to refer to financial profit or loss, the phrase is also used to refer to the main point, the essence, the core. As in, "get to the bottom line." In economic development the triple bottom line is the bottom line. To succeed, economic development needs all three – people, place, and prosperity. Economic development exists in relation to people and planet. For economic development to succeed, triple bottom line performance is required.

ENDNOTES

[1] Twenty-seven states and DC as of March 2015, with 14 additional states working on enabling legislation: https://www.bcorporation.net/what-are-b-corps/legislation.

[2] The Casebook can be accessed at: http://tbltool.org/files/CUPA_Casebook.pdf.

economies of scale

By David Myers, CEcD, MA

ECONOMIES OF SCALE

For communities outside of metropolitan areas, workforce development starts with an understanding that the very existence of a workforce cannot be taken for granted. The national conversation about skills gaps and training in these areas invariably includes a discussion about growing a population that in some cases has not changed in many years or may even be declining. Indeed for many rural and micropolitan communities, enhancing what you have is considered the best, if not the only, workforce development strategy available. Done successfully, it provides a strong workforce to existing and potential employers and enhances wage and economic growth in the community. Selling this to decision makers at both the corporate and the local government level, however, is another matter.

It wasn't too long ago that labor intensive industries from call centers to commodity manufacturers almost naturally gravitated to micropolitan and rural areas due to an abundance of available, motivated labor. The thinking was that the population in smaller communities was motivated to stay there and that they would be good, loyal employees. Both of these assumptions were true and the strategy worked, at least for a while. Good employees have a tendency to want to improve. They acquire new skills, gain experience, and seek new opportunities. As this base cycled through the area employers, the companies often have found it difficult to recruit replacements.

In an effort to reach out to young people who have left school or are underemployed, the Ponca City Development Authority launched an outreach campaign to an identified demographic to let them know about job opportunities and training that are available in the community. This mailer is an example of the message used in that campaign.

For this reason, call centers, back offices, and many manufacturers are now more inclined to look towards urban and suburban centers where a larger pool of applicants is more likely to be found. Rural areas simply do not replenish their populations through migration or immigration as fast as urban areas do. This is not to suggest that urban areas are not facing labor issues of their own. It is, however, a different situation than in rural areas.

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MANAGING TODAY'S WORKFORCE CHALLENGES IN MICROPOLITAN AND RURAL COMMUNITIES

Addressing workforce strategies can be particularly challenging for rural and micropolitan communities. Population migration in these communities is generally not as robust as it is in urban and suburban areas. Solutions go beyond workforce training, screening, and recruitment to population attraction strategies that often include the development of housing and community amenities. This article focuses on strategies employed in Ponca City, Oklahoma, that are designed to enhance the population of this micropolitan city of 26,690 people through aggressive workforce strategies, innovative housing incentives, and the addition of unique community amenities designed to help grow the population and fill available jobs.

There are exceptions to this urban focus, of course. Food processing, oil & gas extraction and production, as well as other resource based enterprises continue to thrive in rural areas. In addition to the vital ability to locate at the source of a natural resource, lower population densities allow companies to operate with fewer restrictions than they could in a more crowded city. A stock yard, for example, might not co-exist well with a modern suburban neighborhood.

The lack of people to fill available jobs and training programs has led many rural communities to define population attraction as a more important objective than job creation. Growing people, however, is easier said than done.

This is hardly a secret. It is important, however, to recognize that a lot of stereotypes about rural communities and rural economies are simply untrue. Not every rural county in the United States is hemorrhaging population. Indeed, as shown in the map from the U.S. Census Bureau titled Population Change in Non-Metro Areas, quite a few are growing. Moreover, people who live outside of urban areas are just as innovative, creative, and open to change as their counterparts in the city. Entrepreneurship development in Fairfield, Iowa; school to work programs in Vermillion County, Illinois; and a world class, free wireless net covering all of Ponca City, Oklahoma, are the envy of larger cities. Many leading industries have operations in rural areas for reasons far too numerous to list here and the wages paid are competitive with those paid in cities.

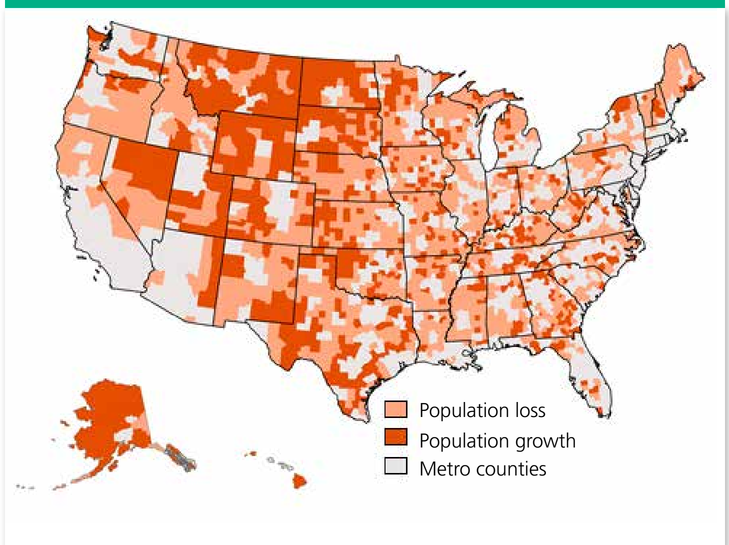
While a major boost to many rural economies, the recent oil boom brought with it significant workforce challenges, particularly for micropolitan cities. The lure of highly paid oil and gas work, which attracted workers from across the country, often drained smaller communities of available labor. This made it more difficult for some industries in those communities to attract labor, if a pool existed at all. Regardless of the fact that jobs in bricks and mortar plants offered more permanence, sustainability is a weak fringe benefit compared to a wage that was usually significantly higher in the oil patch.

CHALLENGES FOR RURAL AREAS

The lack of people to fill available jobs and training programs has led many rural communities to define population attraction as a more important objective than job creation. Growing people, however, is easier said than done. Internal migration has long been viewed as important in many rural areas. Some have offered free land, college debt repayment and other novel programs, but their success has been limited. Migration in the United States, when it hasn't been the result of higher wage attraction, has come in large part from retirees returning home, as well as from relatives seeking stronger family connections.

There are significant challenges to population attraction in rural and micropolitan areas that are, perhaps, more pronounced if not different than in urban and suburban areas. As an example, the issue of the trailing spouse gets a lot of attention from economic developers as part of employee recruitment efforts. This issue looms larger outside urban areas since the job pool in smaller areas may not be as wide or deep as in urban areas. Micropolitan and rural areas tend to be focused on a few specific industries. This could mean a limited number of opportunities, if any at all, for the trailing spouse if their employment goals are outside of the core industries of the given rural area.

NONMETRO POPULATION CHANGE, 2010-13



Source: USDA, Economic Research Service using data from U.S. Census Bureau.

What is often overlooked in this conversation is the difficulty posed to the specialized job seeker themselves. There are countless examples of industry clusters in micropolitan and rural America that provide an abundance of opportunities for a skilled workforce. The jobs pay well, support an attractive lifestyle, and typically provide for sufficient opportunities to change jobs. This is not the case for very specialized professions. Often, there is one and only one position in a smaller community which means if the job doesn't work out, the individual will have to move. This contrasts with urban areas where there may be five, ten or even more similar jobs available without the need to relocate. This is a hurdle companies in smaller areas must face, and they are keenly aware of this challenge when making the decision about where to go or expand.

Immigration into rural areas is a bright spot that has not received much attention. Popular culture, promoted by people who rarely visit rural areas, likes to assume that North Americans outside the urban core have lim-

THE PONCA CITY DEVELOPMENT AUTHORITY

The Ponca City Development Authority (PCDA) is a public trust of the city of Ponca City formed exclusively to promote and support economic development in Ponca City, Oklahoma. PCDA is governed by a seven-member board of trustees which has been granted exclusive decision making authority by the city of Ponca City. Six of the trustees are appointed by the City Commission of Ponca City with a seventh being a serving member of the City Commission.

Funding for PCDA comes from a one half cent sales tax collected in Ponca City. The authorization for this tax was first approved by Ponca City voters in 1994 and has been extended by popular vote three additional times. PCDA has six employees, with an executive director charged with the day to day operation of the organization. In 2009, PCDA became the first economic development organization in the state of Oklahoma to be accredited by the International Economic Development Council.

ited tolerance of diversity. The reality, however, is far different. Immigrants make up a large and growing part of rural populations throughout the mid section of North America.

Communities throughout flyover country are embracing diversity. Finding a Somali working in Guymon, Oklahoma; a Burmese neighbor in Garden City, Kansas or a shift supervisor from Bhutan working in Cherokee, Iowa, is no longer a novelty. There is still much to do in terms of building a cultural infrastructure for these growing populations, but the point is that rural communities are far more tolerant and open to diversity than is typically assumed.

The attraction of foreign born workers is particularly important to the food processing industry. It has proven problematic to attract domestic workers to move for a job that pays a starting wage of $10-$12 per hour. Jobs at this pay level can typically be found in most U.S. areas, making it unnecessary to move for work. Foreign workers, however, often do not have the opportunity to work for those wages in their respective homes. In addition, since food processing operations are often large employers, companies and communities working together have the chance to build a culturally inviting environment for a workforce from a specific area.

Across the wage spectrum, rural areas are also facing a shortage of quality housing, an important factor in population growth. Largely due to the age of the housing stock, existing homes in many rural communities are being sold for much less than the cost of new construction. It is difficult to persuade housing developers to provide a product that will sell for substantially more than other houses. Furthermore, the lower price of homes in rural areas drives appraisals, which banks look long and hard at when deciding to finance new home construction. This is further compounded by the need for developers to bring in their own craftsmen, usually from a distance, to help build a limited number of homes.

The answers to these challenges are as diverse as the populations who now call small towns home. The communities that are succeeding are those that are taking direct action to resolve an issue. Workforce solutions based upon 21st century needs, rather than outdated federal programs and mindsets, have made a real difference. Rural communities tend to trail their urban and suburban counterparts in the development of public/private partnerships, but many are stepping up with flexible ways to make projects pencil in a way that only a smaller, agile city can do. In Oklahoma, for example, the Ponca City Development Authority (PCDA) and the city of Ponca City leveraged the close relationships and agility often found in smaller communities to build three customized initiatives to identify, train, and grow the workforce, as well as to enhance the housing stock in the community.

The answers to these challenges are as diverse as the populations who now call small towns home. The communities that are succeeding are those that are taking direct action to resolve an issue. Workforce solutions based upon 21st century needs, rather than outdated federal programs and mindsets, have made a real difference.

PONCA CITY, OKLAHOMA

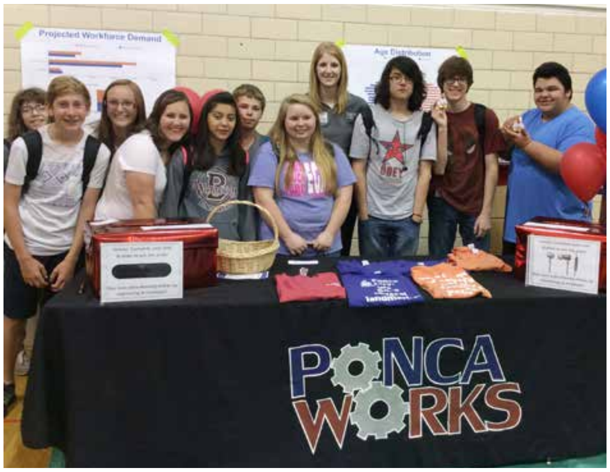
Ponca City, Oklahoma, is located halfway between Oklahoma City and Wichita, Kansas, just east of Interstate 35. The community was the heritage home of Conoco Oil Company prior to that company's merger with Phillips Petroleum in 2002 and subsequent significant downsizing of the company's presence in the area. The community faced a decade of economic challenges, with the former company town economy declining while a new manufacturing based economy was emerging.

Today, Ponca City's population is approximately 26,000 people, slightly higher than before 2002. Venerable manufacturing companies including Mertz Manufacturing Company, Smith Bits, and Continental Carbon have been joined by relatively new arrivals including Dorada Foods, Customer Mechanical Equipment, the University Multispectral Laboratories, Log10, MJ&H Fabrication, and others that have replaced the employment previously provided by a single company. Today, Ponca City offers one of the only 100 percent free and available wireless networks in the United States and is the manufacturing center for North Central Oklahoma.

PONCAWORKS

In Ponca City, PCDA launched a program in 2012 to offer solutions to companies for their most critical workforce needs. This program, called "PoncaWorks," is in essence, a free headhunting service for local companies. PCDA employs a workforce specialist who utilizes local contacts, social media, and more traditional means to identify, recruit, screen, and place employees for local companies. The PoncaWorks manager meets with managers and company owners, who often do not have the time or ability to truly focus on the hiring process, to help develop job requirements and job descriptions before handling every aspect of recruitment, leading right up to the interview.

PoncaWorks was developed in response to the need to fill key jobs in the community. PCDA's business expansion and retention manager, Laurence Beliel, sought to develop a way to provide local industry with a solution to the ongoing challenge of recruiting workers to smaller areas. Employers, typically those with payrolls of less than 100 employees, may not have the human resource capability to develop meaningful job descriptions, much less proactively recruit. There is often a lack of knowledge of the workforce system and a general difficulty in balancing the human resource needs of their companies with their ongoing operational demands.



In addition to providing an aggressive, proactive workforce recruitment tool for local companies, Ponca City's PoncaWorks program also includes a workforce pipeline component that links school age students with local employers to help the students understand the employment opportunities available to them in the community.

The program, which is limited to filling economic base jobs, has been a major success in this community of 26,690 people. Since its inception, PoncaWorks has placed 116 people in key roles with a direct annual payroll to the community of over $4.6 million.

WORKFORCE TRAINING AS AN INCENTIVE

Not every micropolitan or rural community has the ability to provide direct, monetary incentives in a recruitment project. When they are available, workforce is becoming an area in which the use of incentives can make a real difference.

In 2011, Ponca City was working on a recruitment project to fill a food processing facility that had recently been closed by its previous owner. The closing of the plant was a major setback to the community which was already working through the downsizing of its largest private employer. Ponca City was motivated to reopen the facility and re-employ the laid off workers. To accomplish this, PCDA targeted food processing companies in North America with annual sales of at least $75 million. One of the potential candidates was a company now known as Dorada Foods.

There were several good reasons for Dorada to select Ponca City for its new facility. There were also significant challenges that the community had to overcome. One of Dorada's concerns, when comparing Ponca City with a competing community in a different state, was that the other community had a trained workforce ready to go to their customer's high standards. By comparison, Ponca City's workforce would need to be trained. This meant that the company had to consider the cost of "standing around time" when calculating the relative benefits of both locations.

To counter this, Ponca City worked with the state of Oklahoma to use discretionary Workforce Investment Act (WIA) money for on the job training (OJT) of workers from the earlier plant closing. This helped close the gap, but there were a number of employees who had either not been displaced or were in positions not eligible for OJT training funds. As a result, even after the OJT funds were applied, Ponca City was still at a competitive disadvantage.

PCDA was, as noted above, highly motivated to close the gap and close the deal. PCDA decided to apply local incentives, typically used for infrastructure or land, to workforce development. A program was developed called the "Training for Opportunity Program" or TOP, which applied $205,000 in local economic development incentives to cover the OJT cost of workers not covered by the WIA OJT funds. Working with the local Workforce office, the funds were paid by PCDA based upon nearly identical standards as the WIA OJT funds in order to provide consistent reporting standards for the company and accountability to the public.

At the same time, Oklahoma's Career Tech system, through its local campus at Pioneer Technology Center, provided funding for training materials under its Training for Industry Partnership program. The three sources of funds closed the gap. As a result, Dorada Foods began operation in 2012 and today employs 300 people in Ponca City.

Oklahoma Governor Mary Fallin cuts the ribbon at the new Dorada Foods plant in Ponca City. Food processing is often drawn to rural and micropolitan areas for land use and supply chain needs. Providing the workforce for large operations such as Dorada has led Ponca City, and other similar sized communities, to work to broaden the community's appeal to a workforce from outside of the United States.

The METS Mobile Lab is a mobile training and education facility designed to take manufacturing training directly to companies. When METS is not at a company for training purposes, it can be found at schools to help promote careers in manufacturing. The colorful look of the METS Mobile Lab is designed to get the attention of students and to help them see manufacturing as an exciting career option.

School children visit the METS Mobile Lab and have the opportunity to gain hands on experience with real world equipment including 3-D printers, laser cutters, and other tech-based tools. METS is staffed with trained and experienced personnel who help students understand what it means to work in manufacturing today. A visit to METS often means a student will leave with a product they made as a souvenir of their visit.

The expenses for PoncaWorks are all the responsibility of PCDA, which views the program as an ongoing incentive not only for business retention and expansion, but also for recruitment since real solutions to the workforce situation can be a differentiator.

The expenses for PoncaWorks are all the responsibility of PCDA, which views the program as an ongoing incentive not only for business retention and expansion, but also for recruitment since real solutions to the workforce situation can be a differentiator. The cost for the most recent fiscal year, which includes salary, benefits, overhead, and job recruitment expenses including travel to job fairs and plant closing events, was $72,000 (PCDA budget, 2014-2015).

PoncaWorks does not compete with the state's Workforce office. The program, however, provides an assertive partner for the Workforce office, which typically must play a passive and objective role. PoncaWorks has the ability to decide which jobs are the most vital to economic growth and then act aggressively to fill those positions. Such aggressive actions can and do include premium LinkedIn services; individual marketing to individuals known to the PoncaWorks manager or referred to them by others; pushing "word of mouth" networks; and outreach to state unemployment offices, universities, and vocational schools in other regions of Oklahoma, as well as in bordering states, all designed to find and identify the right prospects for the company to interview. Perhaps as important, the program can provide specific attention to the trailing spouse and manage the recruitment process by treating the couple as a unit or a team, rather than discreet parts.

It is the rare non-urban community that has not wondered if local jobs could be filled by outreach to plant closures in other areas. PoncaWorks has the ability to respond very quickly and have recruiters on the ground when a plant closure in another area is announced. The program manager works with the human resource people at the plant in question to insure maximum exposure to Ponca City jobs for impacted workers. Recruiting people at plant closures has proven marginally effective. In general, the small success achieved through these missions has occurred when PoncaWorks has been able to convince local employers to go to plant closing events and interview and make hiring decisions on site.

The program is not without its flaws. For example, the original program included "incentives" for people moving into Ponca City to take jobs they landed through PoncaWorks. These incentives were provided free to PCDA in most cases as inducements for future business. They included utility deposit waivers, one month free rent at participating apartment complexes, free recreational outings, discounts, and more. The ongoing renewal of these offers and the outreach to new businesses to enter into the program became more difficult than the incentive was judged to be worth and this part of the program was dropped.

PoncaWorks also has a "grow your own" component as well. This part of the program works with schools and local colleges to insure that teachers, counselors, and students understand local job and educational opportunities. What is unique to Ponca City, however, is the METS Mobile Training Facility.

METS MOBILE TRAINING FACILITY

The METS Mobile Training Facility is really a 53' semi-truck that is designed and developed to help students understand and appreciate employment opportunities in the manufacturing sector. The trailer and cab are painted in a manner consistent with a NASCAR truck with bright colors, attractive graphics, sophisticated sound systems, running lights, and other attraction getting devices. The idea is to create a "Wow" factor when the truck comes on campus. Inside, the trailer is a fully climate controlled, interactive training center with a 3-D printer, plasma torch, MIG welder, CNC lathe, CNC mill, a laser cutter, precision tools, a bench press, and six laptops tied into overhead monitors for instructional support. METS is a focused manufacturing support facility although a second, similar mobile facility supporting the buildings and trades industries has been added as well.

METS, which stands for Mobile Education Training System, was designed, developed and is owned by Pioneer Technology Center (PTC), the local campus of the Oklahoma Department of Career and Technical Education, a state agency responsible for providing vocational education in the state. METS has made numerous visits to school campuses throughout the state and has served as a support facility at an Oklahoma City FIRST Robotics competition. FIRST, which stands for “For Inspiration and Recognition of Science and Technology,” is an international robotics competition founded by inventor Dean Kamen in 1989 designed to inspire young people in careers in science and technology. METS is manned by PTC and PCDA staff who help students from third grade on up experience an interactive manufacturing environment and understand why the trigonometry they just studied in class is relevant.

The goal of METS is to encourage students to become interested in careers in manufacturing by helping them understand what manufacturing today really does. METS also helps teachers and counselors understand the opportunities available to their students as well. This fits into PCDA’s plans since Ponca City is a manufacturing community. Perhaps as importantly, METS helps to reposition and elevate the importance of manufacturing in young and more mature minds alike by providing an environment more reflective of the real opportunities which exist in the field today.

The city of Ponca City Aquatic Center is a city-constructed, YMCA operated facility that provides a recreational experience that is second to none. With two indoor pools, climbing walls, indoor track, exercise facilities and more, it has become a major attraction tool for companies and potential residents alike since its opening in 2011.

In evaluating the first year, it was determined that the program should be changed to insure that all homes incentivized would be eligible to be counted as comparable sales for purposes of appraisals. The goal is to elevate home values by increasing appraised values. This will make future home financing easier, not to mention enticing new home construction from those taking advantage of the HIP.

HOUSING INCENTIVE PROGRAM

In order to further enhance the available workforce issue in Ponca City, local leaders wanted to look for ways to increase the housing stock. Appraisals play a significant role in the ability of micropolitan and rural areas to attract market rate developers. Simply put, older homes tend to appraise lower and there are few, if any, comparable sales of new homes upon which to base financing. It is difficult, if not impossible, to get market financing for new homes when the “market” as expressed by appraisals, says that the cost of housing is 25 percent below the cost of a new home. This creates a cycle that makes new home construction problematic to say the least. The few homes that are often built in non-urban areas tend to be custom homes and these houses do not count as “comps” for the purpose of appraisals.

The Ponca City Housing Incentive Program or HIP, has succeeded in attracting the first new market rate home development project in the community in over a decade. The incentive program provides builders and developers with a certain amount of funding, based upon the sale price of the home, to bridge the gap that often occurs when builders consider developing homes in markets outside the urban core.

The city of Ponca City decided to approach this problem head on with a program simply called the “Housing Incentive Program,” or HIP. HIP provides an incentive of up to 15 percent of the cost of a new home upon the closing of the sale. Homes sold above a certain level only receive 10 percent and a home that sells for $300,000 or more is limited to a $30,000 incentive. The incentive is paid by the municipally owned utility and has been justified through recovered utility payments and sales taxes as projected in an economic impact model provided by PCDA. The amount of the incentive is limited each year.

In the first year of the HIP program, the incentive was fully subscribed with five custom homes and one spec home built. In evaluating the first year, it was determined that the program should be changed to insure that all homes incentivized would be eligible to be counted as comparable sales for purposes of appraisals. The goal is to elevate home values by increasing appraised values. This will make future home financing easier, not to mention enticing new home construction from those taking advantage of the HIP. This year, the city raised the number of homes that could be incentivized to successfully attract the city's first multi-home developer in decades.

CONCLUSION

Significant challenges remain for smaller communities across the country, not the least of which are towns with a lot of heart but little money to play in an ever increasingly competitive world. Not every community can raise the money for a PoncaWorks, a METS Truck or a housing incentive. Many do not have the capacity to pursue grants for workforce solutions. Small towns, in general, are very proud of their history and their quality of life. Understanding that the former is largely irrelevant to job and wage growth and that the latter is in the eye of the beholder can help rural areas adapt to the headwinds of today's economy while seizing the opportunities for their share of an expanding, now global economic pie.

Even in the media's urban obsessed world, rural living remains the romantic ideal of American life. A significant number of Americans are potential rural residents. With so many cities pursuing "talent" recruitment strategies that are limited to a few high profile industries, rural communities have the opportunity to focus on the immense talent that is often overlooked by others.

It should be clear today, but surprisingly is not, that urban areas and rural areas have complementary interests. Resource based industries, which are very comfortable in the country, are the foundation of the national economy and allow the high tech, trendy jobs of Silicon Valley, Austin, and Hollywood to even exist. As advanced and "creative" as certain urban areas imagine themselves to be, we all have to eat, put fuel in our cars, power all of our gadgets, and produce materials for just about everything else.

Change is, perhaps, most difficult for economic developers. While we pride ourselves on adaptability, it is becoming clear in rural and micropolitan areas that the profession has been stood on its head. It was not long ago that the focus of economic developers was on job growth and little else. In this brave new world of jobs but few workers, job growth in rural North America, for now at least, is on the back burner in favor of just about everything else.

Even in the media's urban obsessed world, rural living remains the romantic ideal of American life. A significant number of Americans are potential rural residents. With so many cities pursuing "talent" recruitment strategies that are limited to a few high profile industries, rural communities have the opportunity to focus on the immense talent that is often overlooked by others.

northern new mexico's
VENTURE ACCELERATION FUND

By Kathy Keith

HISTORY

When Los Alamos is mentioned, nuclear research and the world-famous Manhattan Project immediately spring to mind. These days, Los Alamos National Laboratory is a hotbed of scientific research, innovation and the main economic engine in all of northern New Mexico. The Laboratory employs more than 8,500 people in the region and hundreds of additional subcontractors in an area where poverty and prosperity are sharply defined.

In 2006, Los Alamos National Security, LLC (LANS) assumed a federal contract to manage the Laboratory. The four members of the limited liability corporation are the University of California, Bechtel, Babcock & Wilcox Technical Services, and URS Energy and Construction. A Board of Governors oversees the four LANS members, and includes three appointees each from the University of California and Bechtel alongside five independent governors selected for their field expertise and four advisory governors. The president of LANS, LLC, Charles F. McMillan, also serves as the Laboratory director.

As part of their bid to manage the Laboratory, LANS proposed to re-invest a percentage of their at-risk earned fee into the northern New Mexico community. The initial contract award covered a period of seven years (2006-2013), during which approximately 5.6 percent of the corporation's fee was allocated to help build a thriving community in the region. A document that came to be known as the Community Commitment Plan served as the guide for these community investments.

Kyle Hawari and Brooks Thostenson, founders of Taos Mountain Energy Foods, are moving into a new manufacturing facility in Questa, New Mexico, bringing jobs to the rural area and expanding their business exponentially. They are a 2014 Venture Acceleration Fund awardee.

Although the initial contract expired in 2013, the LANS Board of Governors has continued to invest in northern New Mexico via the Community Commitment Plan's three pillars – education, economic development, and charitable giving. Since 2006, approximately $3 million has been invested annually ($1 million per pillar). When the Community Commitment Plan was launched in 2006, administrators at the Laboratory's tech transfer division (now known as the Richard P. Feynman Center for Innovation) wanted to boost local technology companies. The Venture Acceleration Fund (VAF) was established by LANS and is now an annual program supported by the economic development pillar of the Community Commitment Plan.

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A SCALABLE MODEL FOR COMMUNITIES

In northern New Mexico, investments in high-growth companies – the region's job creators – are being made through the Venture Acceleration Fund (VAF). The VAF was established by Los Alamos National Security, LLC (LANS), the company that manages Los Alamos National Laboratory as part of the Community Commitment Plan launched in 2006. Now, the VAF is a collaborative investment tool that includes area municipalities and organizations, administered by the Regional Development Corporation. The VAF program won the 2014 IEDC Gold Entrepreneurship Award, and has recently been awarded a Cluster Grant for Seed Capital Funds by the U.S. Department of Commerce Economic Development Administration to expand the VAF and develop an equity investment fund.

Today, the VAF is a collaborative investment tool supporting high-growth northern New Mexico companies. LANS remains the cornerstone contributor, with investments totaling more than $3 million in the VAF alone since 2006. Partnerships with Los Alamos County, New Mexico Manufacturing Extension Partnership, Santa Fe County, and the City of Santa Fe have transformed the VAF into a multi-investor alliance to support economic growth in the region. The VAF is administered by the Regional Development Corporation (RDC), incorporated in 1996 as the Department of Energy's "Community Reuse Organization" (CRO) for the Los Alamos site. As a CRO, the RDC's mission is to diversify the economy within the north central New Mexico region. Additional technical assistance is provided in partnership with the Richard P. Feynman Center for Innovation and the Community Programs Office at the Laboratory.

THE EARLY YEARS

Initially designed to get innovation to market faster for burgeoning tech companies that had a tie to the Laboratory, the VAF focused on boosting these entrepreneurs who had identified promising markets and could articulate their business plans. Some of these entrepreneurs were past employees at the Laboratory, and others were still working there when their projects were funded.

One of the earliest recipients, Acoustic Cytometry Systems (ACS), spun off from the Laboratory as its own company to commercialize acoustic focusing technology in flow cytometry and sample preparation. The flow cytometry research team at the Laboratory won a string of R&D 100 awards, and the resulting technology was quickly praised as the high-performance, lower-cost solution for disease diagnosis within the medical industry. R&D 100 awards, conferred by *R&D Magazine*, identify and celebrate the top technology products of the year.

What ACS managed to do was turn conventional cytometry on its head, developing a method that used sound waves to push cells (tissue samples) through cytometers (cell meters). This allowed a much closer examination for medical diagnostics. Suddenly, technology used in diagnosing HIV, cancer and other diseases formerly limited to first-world countries was now feasible for use in under-developed nations. Two years after the VAF investment, in 2008, ACS was acquired by life sciences giant Invitrogen Corp. of California.

Another early success story is Star Cryoelectronics. Founder Robin Cantor was employed at the Laboratory before launching the business. In 2008, Star Cryoelectronics was awarded $100,000 in that year's round of VAF awards. Over the years, the company has built up a significant product line based on superconducting films. The sensors and x-ray detectors found in its early offerings are now paired with readout electronics to build complete systems within the spectrometry industry.

In the years since the VAF award, Star Cryoelectronics has received more than 20 federal SBIR (Small Business Research and Innovation) grants, including the coveted Tibbetts award for the company's innovation and business impact. Numerous statewide awards have been bestowed as well, including the New Mexico Flying 40 and New Mexico Private 100. In 2014, the company landed a prestigious R&D 100 award and capped off the string of successive accolades with a $1 million DOE contract.

Cantor attributes much of his early success to the business advisory program managed by the RDC, along with the VAF. Through this advisory program, consultants offer free advice – market research, expansion/retention strategies, and public relations – for high-growth businesses in the northern New Mexico region and are funded by the same Community Commitment Plan that funds the VAF. Star Cryoelectronics is based in Santa Fe and is committed to staying and expanding in the area. The company currently employs seven full-time staff members and anticipates it will add new jobs in 2015.

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EXPANSION BEYOND LABORATORY TIES

In 2010, administrators of the VAF wanted to expand the fund's reach to serve other economic-based businesses with the potential for growth in the region. The reason for expanding the fund beyond technology companies was simple – while the amount of technology research happening at the Laboratory was still robust, complex innovations often take time to gestate and come to fruition. Northern New Mexico is a place full of stark contrasts

Developers and engineers at Flow Science, based in Santa Fe. The company was a 2014 VAF awardee, and sells its flagship computational fluid dynamics software (FLOW-3D) worldwide.

Sydney Alfonso, founder and CEO of Etkie, a start-up that received a 2015 VAF investment. The company employs Native American artisans and is debuting their line of original jewelry at this year's Paris Fashion Week.

and low population, making the Lab the heartbeat of the entire region's technology industry by default.

RDC consultants were assisting businesses of all stripes, coaching them with expertise and helping them network with each other to boost growth. They were aware of other high-growth economic-based businesses in the region that didn't have high tech products at the core of their expansion plans. For example, agricultural producers in the most rural portions of the region were the ones poised to create jobs – the ultimate goal of the VAF. Restrictions against non-technology based businesses were loosened in 2011, and the VAF applicant pool widened immediately to include companies focused on agriculture and education as well as manufacturers of everything from food to beauty products. As the word spread, companies and entrepreneurs who had been prevented from applying began to launch campaigns for funding.

TRAJECTORY: VAF – GATES FOUNDATION – SBIR – NATIONAL LEADER

One of the early successes right out of the gates after the applicant pool expansion was Imagine Education of Taos, New Mexico (now known as MidSchoolMath). Years of teaching mathematics at the middle school level in rural New Mexico led Scott Laidlaw, Ed.D., to found the company along with Jennifer Harris, CPA. Building on the story-based in-classroom video games Laidlaw developed while teaching, the company began delivering immersive, multimedia learning environments that enable students to comprehend math on their own terms.

Laidlaw says the $100,000 VAF investment, which helped the company finish their acclaimed interactive mathematics-based game *Ko's Journey*, was critical to the company's success – a refrain that is often repeated by early-stage entrepreneurs who are funded by the VAF. On the heels of the VAF award came the $500,000 Next Generation Learning Challenges grant from the Bill and Melinda Gates Foundation and the William and Flora Hewlett Foundation. From there, the company expanded their online prototype and produced a documentary film, *The Biggest Story Problem: Why America's Students Are Failing At Math*. Termed the "Mid School Math Cliff," the United States represents the most precipitous decline in competency in the world. Laidlaw founded his company on the idea that storytelling, the oldest architecture of human learning, transforms student attitudes and improves test scores.

Following the Gates Foundation award, the company received a $1.05 million SBIR grant to further their work in helping students avoid this competency drop-off. Now, the company has changed their name to MidSchoolMath and hosts a national conference on the topic annually. They remain committed to growing in the northern New Mexico region and bringing dollars to the area through jobs and tourism from conference attendees. Additionally, a groundbreaking partnership with Santa Fe Public Schools that will utilize and develop the curriculum to a scalable model that other communities can implement is underway.

SMALLER INVESTMENTS, LARGER IMPACT

The growth in the applicant pool to the VAF has been exponential. In the early years, larger dollar amounts were allocated to three to four winners annually. A few years into the program, the decision was made to invest smaller amounts into a greater number of New Mexico-based businesses to serve more companies across the region. While the VAF's mission to support high-growth companies is focused within seven northern counties (Los Alamos, Mora, Santa Fe, Rio Arriba, Sandoval, San Miguel, and Taos), occasionally a company from Albuquerque or central New Mexico is funded. These exceptions are generally made when the company's potential to create jobs is demonstrative.

The area of concentration in northern New Mexico for VAF investments mirrors the RDC's area of focus.

CUMULATIVE RESULTS

$3.2M INVESTED → **49** COMPANIES → **159** JOBS → **$113.5M** RETURN ON INVESTMENT

2014 impact numbers are not available at press time, therefore they are not included in the cumulative results noted above.

Awards have averaged $40,000 per company since the decision to invest in a larger number of businesses was put into effect, with the greatest number of companies (10) funded in 2014. As a result, 53 New Mexico businesses have received VAF investments since 2006. Businesses in every stage of development are considered, with most awards going to early- and second-stage companies that are poised for long-term growth.

The fund has had an enormous positive impact in the northern New Mexico business community, enabling startups and second stage businesses to create new jobs. Since its inception in 2006 and through 2013, a total contribution of $3.2 million in 49 northern New Mexico businesses (44 of which are still in business) has resulted in a total of $113.5 million in cumulative economic impact, with 159 jobs created or retained.

NEW INVESTORS FOR THE FUND

As elected officials began to take note of the Venture Acceleration Fund and how it was positively impacting the largely rural northern New Mexico community – particularly in job creation – area municipalities began to inquire about joining the fund as investors. The first to throw their hat into the ring was Los Alamos County in 2010. County administrators recognized the opportunity to leverage their investment in economic development by joining forces with the fund and extending their impact beyond the county borders. They have remained a steady partner, contributing $25,000 annually into the fund each year.

As elected officials began to take note of the Venture Acceleration Fund and how it was positively impacting the largely rural northern New Mexico community – particularly in job creation – area municipalities began to inquire about joining the fund as investors.

Additional investors hopped on board in 2014. The City of Santa Fe committed $30,000 of their economic development money to support the VAF and growing businesses in Santa Fe. New Mexico Manufacturing Extension Partnership (MEP), based in Albuquerque, recognized the ideal opportunity to assist more businesses in the northern part of the state. A standing partnership with Regional Development Corporation business advisors that has resulted in numerous referrals for MEP alerted them to the need in northern New Mexico. They joined the fund with $25,000 in 2014. Santa Fe County became a partner in 2015 with a $20,000 investment, and other New Mexico counties have expressed interest in joining this year.

VAF RECIPIENTS BY INDUSTRY 2006-2015	% RECIPIENTS 2006-2015
Information and Communication Technologies	25%
Retail and Consumer	18%
Energy and Utilities	13%
Biotechnology	11%
Manufacturing	11%
Optical/Detection	5%
Healthcare	5%
Educational Tools	4%
Aerospace	4%
Chemicals	2%
Nanotechnology	2%

CORNERSTONE INVESTOR TURNED COMMUNITY PARTNER

Part of the appeal for municipalities as they sign up to invest in the VAF is the fact that their investment is anchored by LANS, which has invested more than $3 million into the VAF since 2006. While the VAF was initially created to further technology innovations at the Laboratory, it has become a community project that is creating new opportunities for cooperative agreements between public and private investors. None of this would have happened if LANS had not specifically expressed interest in boosting entrepreneurial growth by directly investing into local companies.

POLICY CHANGE: PAYBACK IMPLEMENTATION

Up until 2013, no payback was required from any company at any time and no equity stake was taken by investors. Fund administrators began to think about sustainability and requiring successful entrepreneurs to "pay it forward" to other entrepreneurs down the line. In 2013, a new payback trigger was implemented. Companies agreed that if they were acquired, moved out of state or reached certain revenue goals within a set timeframe they would pay back their investment in full at zero interest and at a pace that worked for the company.

Essentially, the program shifted from a grant to a zero-interest loan. Administrators were initially worried that this would prevent companies from applying. However, it became immediately apparent that the VAF (even as a zero-interest loan) filled a gaping hole in commercial lending following the busts that occurred in 2008. Many early- and second-stage businesses still have a difficult time obtaining cash if they fail to meet traditional lenders' strict financial requirements.

Now, the VAF represents a solid option for many companies in New Mexico that have great growth potential but are unable to qualify for traditional lending. In more than a few cases, the VAF investment has saved small businesses from collapsing. Instead, with the timely investment, many of these businesses were able to get their product or innovation to market and reached a stable point where profitability and job creation became natural outputs.

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Mark Sanchez of FLUTe (Flexible Liner Underground Technologies), in the company's new headquarters in Alcalde, New Mexico. FLUTe received a 2014 VAF investment that helped bring a vital part of their manufacturing process in-house.

POLICY SHIFTS WILL CONTINUE

The new payback trigger paid off for the VAF immediately. A 2013 winner, Titan Aerospace, was acquired by a Fortune 100 company in the early months of 2014. They paid back the $30,000 they had been awarded in full, which was invested into the 2014 pool in its entirety. Not only did the fund celebrate repayment, but the state

VENTURE ACCELERATION FUND AT-A-GLANCE

Founded:

- 2006 by Los Alamos National Security, LLC as part of a new Community Commitment Plan for northern New Mexico

Investors:

- Los Alamos National Security, LLC
- Los Alamos County (since 2010)
- City of Santa Fe (since 2014)
- New Mexico Manufacturing Extension Partnership (since 2014)
- Santa Fe County (since 2015)

Managed By:

- Regional Development Corporation of Española, NM with technical advice from the Richard P. Feynman Center for Innovation and the Community Programs Office at Los Alamos National Laboratory

Annual Award:

- Averages $350,000 per calendar year
- Averages $25,000 - $50,000 to 5-8 businesses per calendar year

Economic Impact:

- $3.2 million invested
- 53 companies awarded
- 159 jobs saved or created (through 2013)
- $113.5 million (through 2013)

acquired a new Fortune 100 employer who continues to manufacture and grow their workforce in the region.

The focus of the VAF is vastly different than what it was in its infancy. Instead of a tight focus on technology companies with a tie to the Laboratory, we now have a level playing field for companies in northern New Mexico that can demonstrate how their endeavors will positively impact job creation and bring revenue to the region. Recent years have seen a wide range of businesses benefit from the VAF – everything from geothermic sensors to energy bars to a lavender farm has received investments through the VAF.

Just as the focus has shifted, so must the policies. A new advisory board is being formed to oversee the process and revamped policies and procedures that clearly outline the application process, timeline, and judging as agreed upon by all the investors. This will ensure that the kinds of companies funded meet the job creation priorities of all the investors.

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Elizabeth and Roger Inman, founders of Abiquiu, New Mexico's Purple Adobe Lavender Farm, were awarded 2014 VAF funds to expand their line of products.

LESSONS LEARNED

Navigating the fund from a single investor to a structure that includes multiple investors looking to augment their metrics in various ways has had its growing pains but is transitioning smoothly. When the policy changes are complete, the VAF will be positioned as a model that other communities around the country (and the globe) could adopt for themselves.

The question at the heart of the transition is whether the VAF is a grant, a zero-interest loan or a vehicle for equity investments. The answer is that it is likely to end up a combination of all three. Since the VAF was established in 2006, administrators have taken care to evolve the fund to meet the needs of the unique community it serves. Now, as various models to grow the VAF are investigated, it will continue to evolve to assist northern New Mexico entrepreneurs.

New Mexico Governor Susana Martinez (third from left) breaks ground for a new facility that PMI (Performance Maintenance Inc.) built in 2014. The family-owned business was a 2014 VAF awardee, and is steadily creating jobs in the region.

Investors and advisors have considered a future arm of the VAF that would take equity stakes in businesses it invests in – something that businesses have asked VAF administrators for in the past. In March of this year, the RDC received a competitive $248,946 Cluster Grant for Seed Capital Funds from the U.S. Department of Commerce Economic Development Administration. The grant will improve the performance and impact of the Venture Acceleration Fund's existing seed fund by providing technical assistance to existing portfolio companies and by

VAF ENHANCEMENT PROJECT AT-A-GLANCE

Funded:

- 2015 by U.S. Department of Commerce Economic Development Administration (EDA)
- $248,946 Cluster Grant for Seed Capital Funds awarded to RDC, March 31, 2015

Project Goals:

- Conduct a feasibility study for introducing an equity component to the fund
- Widen VAF applicant pool by developing the pipeline of potential applicants
- Provide technical assistance to existing VAF portfolio clients by partnering with entrepreneur-led development organizations

better connecting the ecosystem's stakeholders. The project will develop a feasibility study for a larger regional seed capital fund to be able to take equity in early-stage companies, especially those focused on science- and technology-based products and services.

The impact of this collaboration between municipalities, non-profit organizations and one of the most important research facilities in the country cannot be discounted in a state like New Mexico where every dollar invested into economic development counts – it is moving the needle of the overall economic health of the region.

HIGH IMPACT COLLABORATION

Momentum is on the side of the Venture Acceleration Fund in New Mexico. 2015 brought 61 applicants – a record number. The VAF was honored with the award for entrepreneurship from the International Economic Development Council (IEDC) last fall. Questions about the process were already being submitted to fund administrators a full four months before the call for applicants went out in March.

The impact of this collaboration between municipalities, non-profit organizations and one of the most important research facilities in the country cannot be discounted in a state like New Mexico where every dollar invested into economic development counts – it is moving the needle of the overall economic health of the region.

2015 SPRING CONFERENCE SPONSORS & EXHIBITORS

IEDC would like to thank the sponsors and exhibitors of the **2015 Economic Future Forum** for demonstrating their commitment to the important work of economic developers. It is through their generous support that IEDC has brought leaders of the profession together for this forum of professional development, peer networking, and discussions of the most imperative issues facing economic developers today. We proudly recognize the following sponsors and exhibitors as partners in helping economic developers to build strong, more vibrant communities.

CHAIRMAN'S CLUB:

Accrinet

International Council of Shopping Centers

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BNSF RAILWAY

Bloomberg MEDIA

community systems

JPMorgan Chase & Co.

resource development group — innovative economic development fundraising

DIAMOND

Wisconsin Economic Development Corporation

PLATINUM

MGE — Madison Gas and Electric

City of Madison Economic Development

Office of Corporate Relations — University of Wisconsin–Madison

SILVER:

RDC National, Inc. — Economic Development & Commercial Real Estate

Redevelopment Resources

University Research Park — University of Wisconsin–Madison

BRONZE:

Madison Region Economic Partnership

Diane Lupke & Associates, Inc. — Consultants in Economic Development & Emerging Markets

WPS — Wisconsin Public Service

EXHIBITORS:

Business Climate

emsi — a careerbuilder company

AdyAdvantage

Wisconsin DWD

NEWS FROM IEDC

IEDC ANNUAL CONFERENCE IN ANCHORAGE

The Annual Conference in Anchorage, AK, will prove to be a culturally and educationally enriching experience, highlighting the culture of Alaska Natives and discussing indigenous populations' economic development strategies. The conference will start with a traditional Dena'ina greeting from a member of the Native Village of Eklutna and from Eklutna, Inc., the Alaska Native Claims Settlement Act (ANCSA) Village Corporation for Anchorage's Native Village of Eklutna. The conference will also feature keynote speakers that lead ANCSA corporations, including Rex Rock, Sr. of Arctic Slope Regional Corporation and Sophie Minich of Cook Inlet Region, Inc.

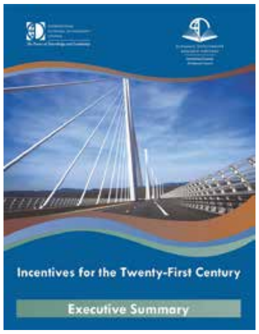
The conference will also provide a forum to discuss the economic development strategies of American Indians, Alaska Natives, and First Peoples in the session "A Mosaic of Experiences: Economic Development for Indigenous Populations."

WHITE HOUSE FORUM ON ECONOMIC DEVELOPMENT

IEDC hosted its fourth annual White House Forum on Economic Development together with its partners at SelectUSA, the National Economic Council, and the White House Business Council. More than 50 top economic development professionals from across the country spent a full day in briefings and discussions on topics including advanced manufacturing, foreign direct investment, infrastructure, and international trade.

Federal participation was led by Valerie Jarrett, Senior Advisor to the President; Bruce Andrews, Deputy Secretary of Commerce; and Jeffrey Zients, Director of the National Economic Council. Other senior officials participated from the departments of Transportation, the Treasury, and Commerce, as well as the National Science Foundation and the National Institute for Standards and Technology. The day concluded with remarks from Under Secretary of Commerce for Economic Affairs Mark Doms and Deputy Director of the National Economic Council Jason Miller.

EDRP RELEASES *INCENTIVES FOR THE TWENTY-FIRST CENTURY*



The Economic Development Research Partners' (EDRP) new report, *Incentives for the Twenty-First Century*, presents path-breaking, effective designs for incentives. For example, forward thinking organizations are earmarking brownfield cleanup funds for employment uses rather than housing. Other communities are increasing the relative share of incentive resources that go to entrepreneurs and small businesses.

Elsewhere, economic development organizations are attracting young talent and reducing costs by giving credits to businesses that advance smart growth and placemaking. Many communities are orienting their incentives toward workforce issues – even using talent as an incentive with training programs that are completely customized to individual businesses' needs.

These examples represent many more progressive incentives outlined in the report, which catch companies' attention while saving time and money, with little cost to the public. The report is available for download at www.iedconline.org.

NATIONAL ASSESSMENT OF RESHORING ACTIVITIES

In spring 2015, IEDC conducted an assessment of reshoring activities in the U.S. Over 170 American economic developers responded. Three key findings of the assessment are:

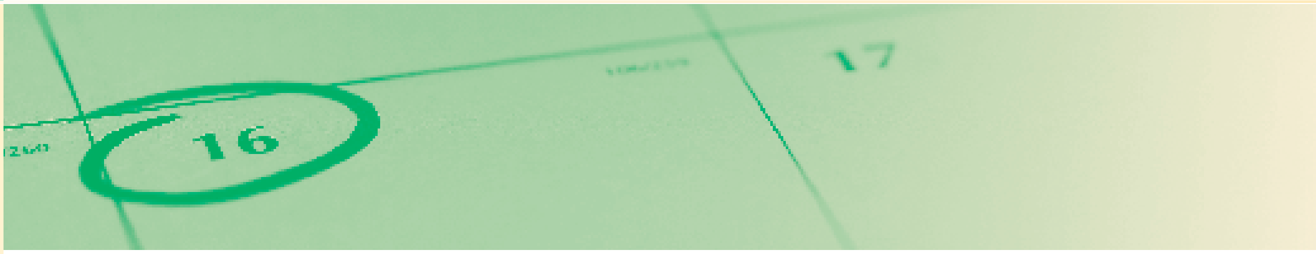
Reshoring activity is taking place in communities with small to mid-sized populations, where the primary industry is manufacturing, and in Southern and Midwestern states.

Three main reasons for reshoring are transportation costs, quality of product or service, and proximity to customer base.

Desired resources to support reshoring activities include workforce training funding and programs, inexpensive access to workforce, site selection, and supply chain databases, competitive incentive packages, and tools for total cost analysis to demonstrate to companies.

INTERNATIONAL
ECONOMIC DEVELOPMENT
COUNCIL

CALENDAR OF EVENTS



RECERTIFICATION FOR CERTIFIED ECONOMIC DEVELOPERS

Fulfill a recertification requirement without tapping into your budget!

Earn two credits towards your next recertification by having an article published in the *Economic Development Journal*, IEDC's quarterly publication.

This is one of a number of ways that you can pursue recertification credits.

Submissions are accepted through-out the year. The Journal Editorial Board reviews all articles and determines which articles are accepted for publication.

For more information contact Jenny Murphy, editor, at murp@erols.com **(703-715-0147)**.

INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

IEDC sponsors an annual conference and a series of technical conferences each year to bring economic development professionals together to network with their peers and learn about the latest tools and trends from public and private experts.

IEDC also provides training courses and web seminars throughout the year for professional development, a core value of the IEDC. It is essential for enhancing your leadership skills, advancing your career, and, most importantly, plays an invaluable role in furthering your efforts in your community.

For more information about these upcoming conferences, web seminars, and professional development training courses, please visit our website at www.iedconline.org.

CONFERENCES

2015 Annual Conference
October 4-7
Anchorage, AK

2016 Leadership Summit
January 24-26
New Orleans, LA

2016 Federal Forum
April 3-5
Arlington, VA

Economic Future Forum
June 12-14
Tulsa, OK

2016 Annual Conference
September 25-28
Cleveland, OH

2015 TRAINING COURSES

Neighborhood Development Strategies
September 24-25
Baltimore, MD

Workforce Development Strategies
October 1-2
Anchorage, AK

Real Estate Development & Reuse
October 29-30
Chapel Hill, NC

Workforce Development Strategies
October 29-30
Edmonton, AB

Entrepreneurial & Small Business Development Strategies
November 5-6
Toronto, ON

Managing Economic Development Organizations
November 12-13
Columbus, OH

Economic Development Credit Analysis
December 2-4
Atlanta, GA

2015 CERTIFIED ECONOMIC DEVELOPER EXAM

October 3-4
Anchorage, AK

2015 WEBINARS

Disaster Preparedness & Economic Recovery (Free)
October
Identifying Economic Recovery Priorities

Digital Marketing Webinar Series
October 27
What You Need to Know about Digital Lead Generation

November 3
Get Google's Attention

November 10
Optimizing Social Media

November 17
Analytics & Metrics to Become a Marketing Leader

November 24
Using Big Data to Tell the Right Story

December 1
Getting More from International Marketing

making (and measuring)

AN ENTREPRENEURIAL ECOSYSTEM

By Maria Meyers

across the country and around the world, communities are working to spur job growth and economic vibrancy. Research from the Ewing Marion Kauffman Foundation shows that companies less than one year old have created an average of 1.5 million jobs per year over the past three decades. Even though young firms were hit hard during the Great Recession, firms fewer than five years old and with less than 20 employees remained a positive source of net employment growth (8.6 percent) from 2006 to 2009, whereas older and larger firms shed more jobs than they created. Entrepreneurship has been adopted globally as an economic development strategy.

But how does a community know its entrepreneurial ecosystem is headed in the right direction? What defines success – and how can it be measured?

U.S.SourceLink has been exploring these questions for the past decade.

Started in Kansas City as KCSourceLink in 2003 with the support of the Ewing Marion Kauffman Foundation, U.S.SourceLink is an outreach program of the University of Missouri – Kansas City. The mission is to match aspiring and existing entrepreneurs to the resources they need to grow by uniting existing programs into collaborative networks providing a highly reliable, visible, and vibrant source of business startup and growth information. Today, KCSourceLink has 240+ partners in the Kansas City region and operates a clearinghouse both by hotline and through the website to assist business owners with finding the resources that they need to succeed.

The annual U.S.SourceLink conference brings together affiliates from across the country to share best practices and work on developing the field..

U.S.SourceLink began expanding across the country in 2005. Affiliates who have adopted the U.S.SourceLink model for their communities, such as NetWork Kansas and IASourceLink, act as hubs in their respective communities, connecting entrepreneurs to the resources they need to grow. This puts the leaders of these organizations directly at the center of a region's entrepreneurial ecosystem, hearing first hand from the entrepreneurs about their needs and in a unique position to identify the region's resource gaps and measure entrepreneurial growth.

Maria Meyers is founder and director of U.S.SourceLink. (meyersme@umkc.edu)

THE PROBLEM WITH "JOBS"

How can a community measure entrepreneurial growth? It's tempting to jump on the silver-bullet metric: jobs, and want to measure them immediately. But different metrics come into play at different stages of a community's entrepreneurial development.

THE RIGHT METRICS FOR THE RIGHT STAGE OF DEVELOPMENT

Most communities interested in economic development are searching for a set of metrics that will allow them to measure success. U.S.SourceLink has worked to build entrepreneurial ecosystems for more than 10 years and has determined that different metrics come into play at different stages of a community's entrepreneurial development. Tying something as dynamic as an entrepreneurial ecosystem down to one or two metrics doesn't help communities know where to focus their efforts, where they're growing or how to fill their gaps. Communities that truly invest in entrepreneurial ecosystems are looking to build something sustainable, something with economic stickiness and continuity – and typical impact measures, like jobs, alone can't tell that story.

In fact, tying something as dynamic as an entrepreneurial ecosystem down to one or two metrics doesn't help communities know where to focus their efforts, where they're growing or how to fill their gaps. Communities that truly invest in entrepreneurial ecosystems are looking to build something sustainable, something with economic stickiness and continuity – and jobs alone can't tell that story.

- How is the community moving ideas toward commercialization?
- How many companies are starting, surviving, and thriving?
- How supportive is the funding environment?
- How rich is the talent pool to feed startups as they grow?
- How engaged are corporations in the ecosystem?
- How engaged is the community in the stories of success?
- How connected is the startup and second stage community?
- How many companies are making successful exits into IPOs or acquisitions?

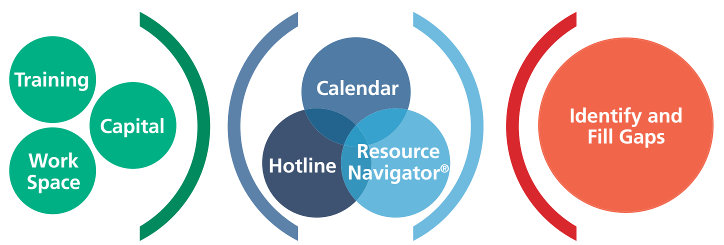
The answers to those questions are the underpinnings of a vibrant entrepreneurial ecosystem – and if a community wants to build one that is sustainable, the first order is strengthening the infrastructure that will support starts and growth, development and retention, and connectivity and density.

BUILDING AN ENTREPRENEURIAL SUPPORT NETWORK

For many communities, there are a number of existing entrepreneurial resources, but confusion abounds about which organization serves which type of entrepreneur and, often, entrepreneurs don't know that entrepreneur support exists or how to find it. This gives rise to a strong desire to create a "one-stop" hub for entrepreneurship in the region. Connecting a strong ecosystem is a step-by-step process. (Figure A)

The first step: Understand the assets already in place. It all starts with an asset map. Finding a community's resources for both technology and non-tech companies is important. Generally, there are formal and informal networks between organizations. Taking advantage of this linkage can help to rapidly develop a list of entrepreneurial resources.

FIGURE A.
How to Build an Entrepreneurial Ecosystem



U.S.SOURCELINK

The U.S.SourceLink network was built from a single mission: make entrepreneurship easier.

From Alaska to Florida, in rural regions and urban centers, U.S.SourceLink has helped communities transform fragmented economic development organizations into vibrant and vital ecosystems of on-the-ground, just-in-time small business resources.

Developed through support from the Ewing Marion Kauffman Foundation, the U.S. Small Business Administration, and the University of Missouri-Kansas City, U.S.SourceLink connects business development resources to each other and to a national network of best practices – all to help communities create jobs, accelerate business, and strengthen local economies.

At U.S.SourceLink, our goals are to:

- Help regions across the United States create ecosystems that spark, support, and sustain entrepreneurship.
- Provide valuable tools and ongoing consulting services to help those networks increase their visibility and value.
- Connect those regional, entrepreneurial ecosystems to a national network of best practices.

U.S.SourceLink provides software and consulting services to organizations to support collaborative entrepreneurial environments. To date, we've connected more than 4,000 resource partners nationwide, in communities with populations ranging from 18,000 to several million. U.S.SourceLink also supports specific segments of the entrepreneurial market. Two examples: www.ArtistInc.com was developed in the Kansas City region to support local artists who are working to grow their careers through their art and www.Whiteboard2Boardroom.com is connecting university technology with potential CEOs and investors to create new businesses from new innovations developed by research institutions.

Launched in 2003 in the Kansas City metro area, KCSourceLink was the first implementation of the U.S.SourceLink model, serving as our pilot program. Since then, all our tools, products, and services have been developed with the input and insight of business and economic development experts.

U.S.SourceLink tools help map a region's resources, bridge gaps in services, track impact and make them visible to the entrepreneurs who need them. Through implementation guides, newsletters, webinars, and the U.S.SourceLink annual conference, we help inspire, build, and strengthen networks with the best and brightest ideas in economic development.

The program has been recognized by the following:

- U.S. Department of Commerce
- Economic Development Administration
- International Economic Development Council
- American Chamber of Commerce Executives
- University Economic Development Association

Planning for Ecosystem Growth.

Once the entrepreneurial network is built and activated, impact can be demonstrated through the network's access, reach, and strength – and collaborations can be built for further entrepreneurial support and economic growth.

Second step: Make those resources more accessible. Making resources visible through a website with a central calendar and directory is what the community needs to help entrepreneurs identify the right resource at the right time. And it's not enough simply to build the website. A strategic, targeted marketing campaign is needed to drive traffic. Most communities use a combination of community presentations, media coverage, and social media to reach potential clients. Working with the entrepreneurial support organizations that become part of the network to tell their clients and magnify the message through social media is another powerful way to spread the word about the website.

Step three: Collaborate. Once the decision is made to create a central connecting point, the community faces two choices: 1) put together a simple directory of resources discovered in the asset project or 2) build upon the linkages to create a network of resources that can work together to support the region's entrepreneurs. The directory will be out of date the minute it is created but a well-organized network of entrepreneurial support can change the community.

Building a network requires commitment on the part of resource organizations and allows a collective discussion of entrepreneurial needs. Bringing service providers together to answer the questions of, "what challenges are our entrepreneurs facing," and "what challenges are we facing" can do a lot to identify gaps in services. Connecting resources to each other is important and can generate collaborations to fill gaps. Filling the gaps strengthens the network and builds a better environment for business growth.

Measuring progress. At this stage, key metrics are simple: how many entrepreneurial resources are in the network? How many times do they get together? Is a central hub website deployed? Is it current? Is there a central calendar that's being populated with events from a range of resources? Once the entrepreneurial network is built and activated, impact can be demonstrated through the network's access, reach, and strength – and collaborations can be built for further entrepreneurial support and economic growth.

Emerging Network Metrics

- Number of network partners
- Number of network partner meetings
- Number of entrepreneurial events listed on central calendar

Mapping assets in Columbus, OH

With support from JPMorgan Chase, Columbus, OH, took the first steps toward mapping its entrepreneurial assets and defining its ecosystem. As part of its Global Philanthropy, JPMorgan Chase helps small businesses acquire the capital, expertise, and other resources they need to grow through its Small Business Forward program. Small Business Forward is a five year, $30 million initiative that supports small businesses by connecting them to critical resources to help them grow faster, create jobs, and strengthen local economies.

NOT ALL BUSINESSES ARE THE SAME

It is often thought that all people who start businesses are the same. The assumption is that they have the same challenges, needs, motivation and that they want to deliver the same economic impact. U.S.SourceLink has been working for over a decade to identify and make visible resources for entrepreneurs. Our experience shows that, after startup, both entrepreneurs and the resources which support them tend to group into four quadrants: Innovation Led, Second Stage, Main Street, and Microenterprise.

Innovation-led enterprises are businesses in which research and development brings forth an innovative product or process. The innovation typically involves intellectual property that contributes to a strong competitive advantage in the marketplace and serves as a foundation for a high rate of growth.

Second Stage enterprises have survived the startup phase and have owners who are focused on growing and expanding. These firms generally have between 10 to 99 employees and $750,000 to $50 million in revenue.

Main Street companies make up a large segment of our economy and define our cultural character. Main Street entrepreneurs aren't driven by rapid growth. The founders create them to build a successful career in their area of expertise and plan to work in the company for a long time.

Microenterprises are generally defined as businesses that require less than $35,000 in capitalization to start and will remain small, less than five employees.

In Columbus, that effort resulted in CBUSiness Forward, a matrix of on-the-ground resources, divvied up by business stage and need. Over the course of five months, U.S.SourceLink worked with entrepreneurial support organizations and an on-site coordinator to help create the matrix used to kick off Startup Week in May. With it, entrepreneurs can choose their business stage and need and quickly see the resources that are available to them. Economic developers can use the matrix to begin to map the region's entrepreneurial strengths and make a plan to fill any gaps in services.

ACTIVATING A RESOURCE NETWORK

Many entrepreneurial resource organizations do not have large marketing budgets – a central website that promotes the entire network can do a lot to make them visible in the community. All about accessibility and visibility, the site can engage aspiring and existing business owners, helping them see the value of reaching out for help.

IASourceLink operates a statewide network of 360+ partners who offer business-building services for startups and growing businesses. IASourceLink was started in 2012 by the Iowa Economic Development Authority with a focus on making entrepreneurship support resources more accessible to all residents of the state.

IASourceLink developed an infographic to demonstrate how an active network can showcase its relevance in terms of users, event attendance, and social media engagement. (Figure B) The infographic is used to communicate impact to clients, network partners, funders, and state officials. The infographic includes metrics for a healthy entrepreneurial support network.

Measuring an Active Network

Network Access

– web visits

– hotline calls

– directory searches

Network Strength

– partners

– calendar events

– satisfaction survey results

Network Reach

– friends and followers

– sources of traffic

LEVERAGING THE NETWORK

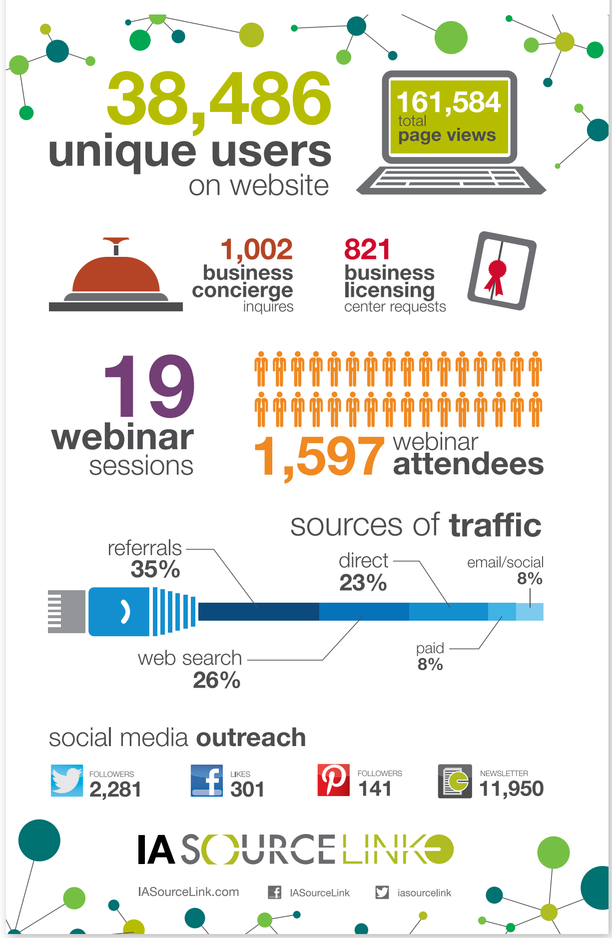
Beginning with simple outreach and promotion, a network can become more effective as it engages, listens, responds, and collaborates to solve problems and fill gaps within the entrepreneurial ecosystem. (Figure C)

As a community begins building a resource network, more support becomes available to starting and growing businesses. Many networks implement a central hotline where entrepreneurs and business owners can make a call to access resources. A central hotline, website, and resource directory along with facilitated community conversations can inform a community about resources available and resources that may be missing. Organizations at the center of networks with a wide range of providers have a distinct advantage: no one else has access to the kind of information resident within all the partner groups. Collectively, the organizers of the network in each community can begin to compile data around a range of questions:

- What resources do people ask for most?
- What types of people ask the questions?
- What kinds of businesses are being developed and where?
- What are the skillsets of local resources?
- What's missing?

Compiling the answers to the questions presents a picture of the entrepreneurial community that may not be apparent. The information can be reported through a series of "gap" reports to a number of constituent groups: the network as a whole, the entrepreneurs and business owners in the community, local economic developers,

FIGURE B.
IASourceLink Measures Interactions among the Entrepreneurial Community.



corporations, investors, and potential funders. Those who respond to the data become potential allies in working on solutions. Clearly defining the gaps in a community through collective data-gathering and reporting can provide rallying points for a community as it seeks to fill and fund the gaps. If the network organizer does not have the skill set to compile and report data, frequently local universities have resources that can assist.

Collaborating to fill gaps

How the community reacts to the identified gaps is important. One measure of success is how well partners come together to collaborate to fill these gaps. And here comes the silver-bullet metric: The end result of innovative programs designed to fill gaps are generally the jobs and starts and sales that everyone wants to measure.

When KCSourceLink took the above questions to its network of partners in the Kansas City region, the challenges of urban core entrepreneurs rose to the surface. Through listening to calls for assistance on its hotline and talking with partners in the urban core, the need to streamline program delivery to these businesses became apparent.

KCSourceLink worked with several network partners to address this issue, developing a joint plan and spurring requests for funding. Rather than starting several new programs, the approach involved "stacking" together programs already in the marketplace and making them more accessible. KCSourceLink, the Women's Business Center, Small Business Development Center and Justine PETERSEN, a microloan program, connected training programs, counseling, and access to capital in a smooth continuum so that entrepreneurs could easily determine the programs of most benefit to them, given their need, and where they should go next as they progressed toward success. (Figure D) Support for the program comes from the City of Kansas City, MO, the Initiative for a Competitive Inner City, and the partners involved. An initial $500,000 in public and private funding was shared among the partner organizations involved and leveraged to create $1 million in microloan support.

AFFILIATE SUCCESS

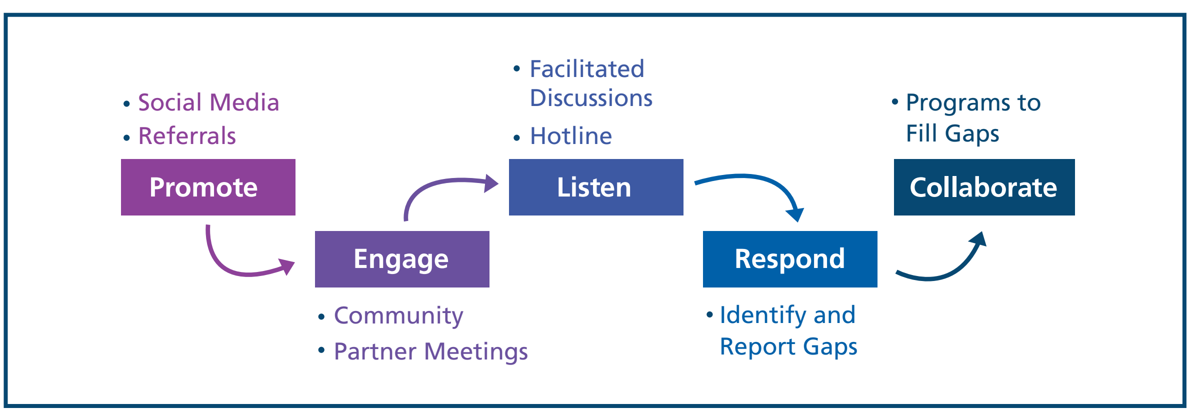
The **Virginia** Community Economic Network networks together resources statewide to connect aspiring, emerging, and established entrepreneurs to business assistance providers. Operating a central directory, The Resource Navigator®, and calendar for the state, VCEN took it one step further by promulgating the tools to a variety of partner websites. Central Virginia Partnership for Economic Development, Mason Enterprise Center at George Mason University, Virginia SBDC at Roanoke, and BizSourceRVA all partner to make all of the resources in the network more accessible, sharing the central The Resource Navigator and SourceLink Virginia calendar directly on their websites.

The Resource Navigator allows entrepreneurs and business owners to search for business resources using multiple criteria such as industry, area of assistance needed, and stage of business. The calendar features business-building events and classes throughout the state.

Working in partnership with these regional organizations allowed VCEN to leverage and magnify their efforts, making their network of resource providers and calendar of events more visible to a broader audience. This solution paid dividends for the partner organizations as well, as they gained access to additional resources and a calendar of events for little additional cost or effort. The winners: entrepreneurs and business owners across Virginia.

In **San Antonio**, the U.S.SourceLink affiliate worked with the City of San Antonio and the San Antonio Public Library to develop Café Commerce, a one-stop shop where entrepreneurs can get personal support, information, resources, and referrals. The program is a combination of a virtual website and a physical location housed in San Antonio's downtown public library.

FIGURE C.
Engaging with the Community to Activate and Leverage an Entrepreneurial Network



The KCSourceLink network collaborates on a Shop Local campaign, driving people to independent business owners through social media during the holiday season.

The combined effort resulted in more than $6 million in new sales and 68 new jobs for the Urban Business Growth Initiative companies in its first 18 months.

Collaborating for funding

A fully functioning network is in the right position to seek federal and private funding to support gaps that are seen as key community needs and are supported by a broad range of entrepreneurial service providers. Most funders, including foundations, state agencies, federal programs, and corporations, look for the following:

- A strong problem statement
- Data that clearly defines the need
- A feasible solution
- Match funds that demonstrate community investment
- Partners that indicate a shared commitment to solve the problem
- Return on investment in the form of measurable impacts such as jobs, debt/equity infusion, sales, business starts

A community that has defined specific needs, has clear data, and is working in partnership to create successful interventions that deliver results is in a position to seek and win support to solve problems. A central hub can consolidate needed data. But more than that, building collaborations can continue to spark, spur, and sustain economic growth.

These large scale collaborations can involve partners, corporations, and local funders to drive significant federal dollars into a community.

For example, in Kansas City a clear gap existed for proof-of-concept funds. KCSourceLink worked with a select group of its partners to apply for and win a $1 million i6 Challenge Grant from the Department of Commerce Economic Development Administration, matched by state and local funding.

The i6 Challenge was launched in 2010 as part of the Startup America Initiative and is now in its fourth iteration. i6 is a national competition that makes small, targeted, high-impact investments in nonprofits, universities, state and county governments, and tribal organizations to support startup creation, innovation, and commercialization. Grantees are selected through a competitive application process based on meeting the stated criteria and raising matching funds.

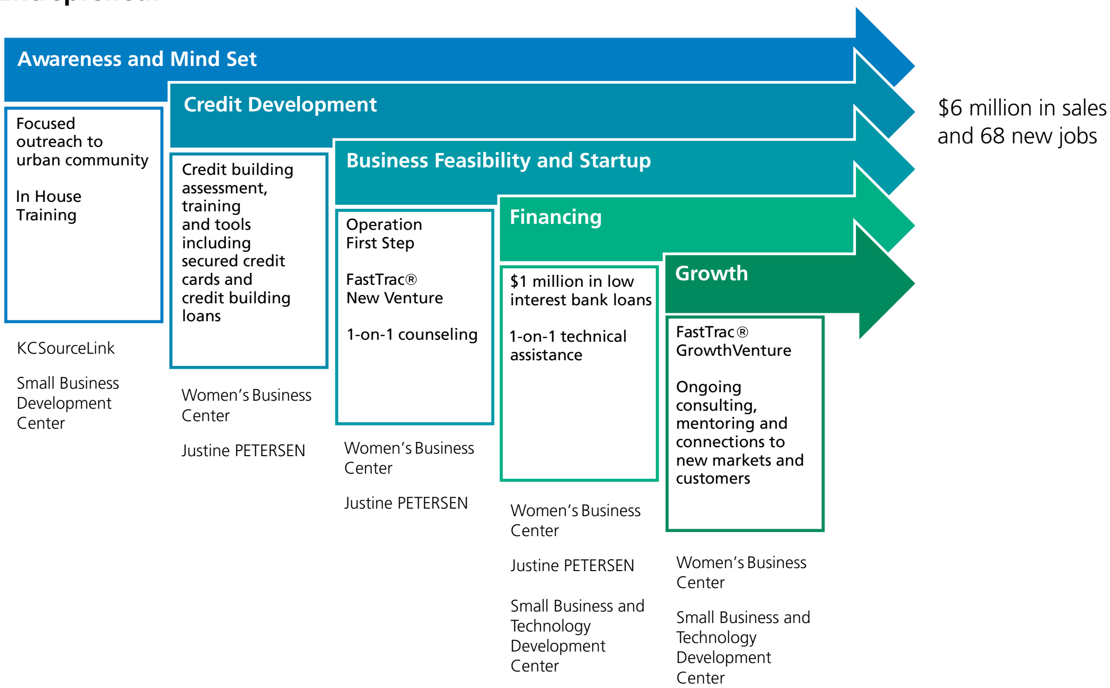
The $1 million grant from the federal government was matched with $500,000 from the Missouri Technology Corporation and $600,000 in in-kind from local corporate partners. Due to the strong partnerships in place through the development of the KCSourceLink network and the clear documentation of the gap in the marketplace, the grant was written and matching funds raised in about 30 days.

The result, Digital Sandbox KC, provides proof-of-concept support to very early-stage companies. This partnership between more than 15 partners produced impressive results in its first 22 months: 23 new companies formed, $17.7 million in follow on funding, 181 new jobs created. The initial success generated a second round of funding from the Missouri Technology Corporation, support from the Ewing Marion Kauffman Foundation, and the expansion of the program into a student program at the Henry W. Bloch School of Management at University of Missouri – Kansas City. The City of Olathe, KS, also became a partner and a number of other cities in the metro area are considering joining. Their funding goes to support small, <$25,000, proof of concept projects in their communities. A central administration and evaluation team lowers the cost of the program and

A fully functioning network is in the right position to seek federal and private funding to support gaps that are seen as key community needs and are supported by a broad range of entrepreneurial service providers.

Luis Hernandez started his bakery with microloan funds.

FIGURE D.
Kansas City's Urban Business Growth Initiative Knits Together a Variety of Resource Partner Programs into a Streamlined System that Provides Easy Access to a Continuum of Services for the Entrepreneur.



puts more dollars toward proof of concept projects. The program recently garnered a second i6 Challenge Grant.

Knowing the gap allowed the community to set a key goal: build prototypes and use them to help companies generate follow on funding. Measures reflect that as well as look at business starts, jobs, and sales. (Figure E)

LEVERAGE THE NETWORK METRICS:

- Gap reports
- Entrepreneurial activity snapshots
- Partner engagement and collaboration
- Funding resources
- Jobs, starts, debt/equity infusion, sales increases

DRIVING THE ECOSYSTEM

The result of this continuum of activity (building, activating, and leveraging a network) is a strong entrepreneurial ecosystem, one that is built on a solid network of entrepreneurial resources, one that engages small business entrepreneurs and corporate players, one that bridges research and commercialization, and one that can begin to tackle larger issues. With the right data, the right funding, and the ear of the community, a well-established resource network can begin to drive future economic development.

Access to capital is one of the biggest issues that entrepreneurs face and building a capital infrastructure is needed to drive a healthy entrepreneurial ecosystem. Both NetWork Kansas and KCSourceLink have tackled this by providing access to capital and the data that a community needs to build its capital base. NetWork Kansas was established by the Kansas Economic Growth Act of 2004 and began operation in 2007. Its mission is to promote an entrepreneurial environment by providing a central portal that connects entrepreneurs and small business owners with the right resources – Expertise, Education, and Economic Resources – when they are needed most. Today NetWork Kansas runs a 500-member statewide resource network upon which it has built a number of successful programs, including E-communities and loan programs. A NetWork Kansas E-Community is a partnership that allows a town, a cluster of towns, or an entire county to raise seed money for local entrepreneurs through donations from individuals or businesses within the community.

The result of this continuum of activity (building, activating, and leveraging a network) is a strong entrepreneurial ecosystem, one that is built on a solid network of entrepreneurial resources, one that engages small business entrepreneurs and corporate players, one that bridges research and commercialization, and one that can begin to tackle larger issues. With the right data, the right funding, and the ear of the community, a well-established resource network can begin to drive future economic development.

Built by leveraging NetWork Kansas partners, the goal of the E-Community partnership is to increase entrepreneurial activity and develop a self-sustaining ecosystem favorable to long-term entrepreneurial growth. The E-Community program has grown from six communities in 2007 to 48 in 2014. The program has leveraged more than $240 million for 450 companies across the state of Kansas. NetWork Kansas reports its metrics on impact to the community, legislators, and the entrepreneurial support network. (Figure F)

Because of its strong network of Resource Partners, KCSourceLink was able to map the capital assets in the Kansas City region, identifying the gaps and making suggestions on how to fill them.

KCSourceLink leveraged its knowledge of the strengths and gaps in the Kansas City regional entrepreneurial ecosystem to win a University Center grant from the U.S. Economic Development Administration. This $200,000 grant, renewable for four years, was matched by $1 million from Kansas City's largest corporations. A portion of this funding and support from the resource partner network and the broader community allowed KCSourceLink to research, develop, and prepare *We Create Capital*, a report of the capital landscape for emerging and growth businesses in the Kansas City region.

This report provides the basis for a strategic plan to increase capital sources, make it easier for entrepreneurs to access capital, and help investors find attractive investment opportunities. The goal is to identify gaps and initiate actions across Kansas City's entrepreneurial community to significantly increase the availability of capital for the region's startup and early-stage businesses. Figure G shows an excerpt from the report outlining specific next steps in building out the financing continuum in the Kansas City region, based on gaps identified in the report. Download the report at www.wecreatekc.com.

Measuring the ecosystem, itself. Working with researchers from both the University of Missouri – Kansas City and the Ewing Marion Kauffman Foundation, KCSourceLink is developing an entrepreneurship dashboard. The dashboard will measure entrepreneurial activity, financing, and company growth across five metric groupings: entrepreneurial density, deals and available

FIGURE E.
Digital Sandbox KC Closed the Proof-of-Concept Funding Gap in Kansas City and Generated Significant Impacts, Resulting in Additional Funding for the Collaboration.

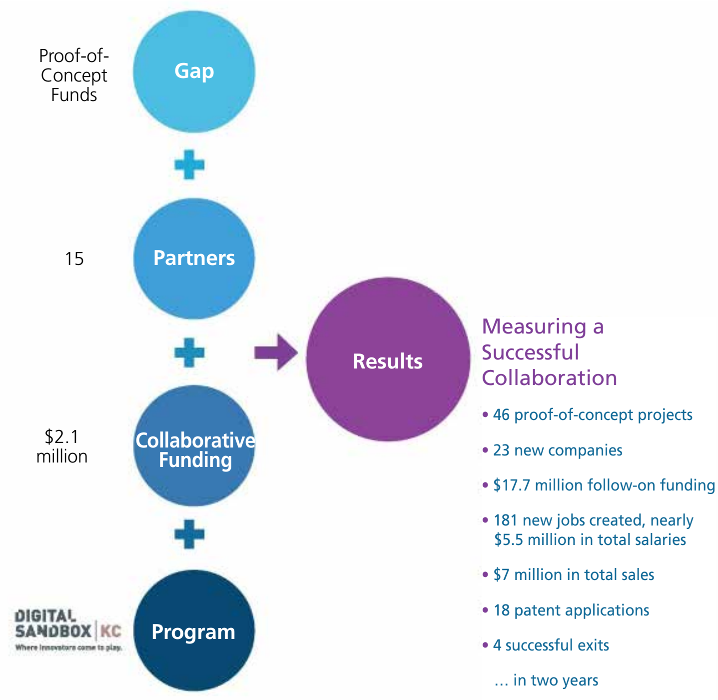
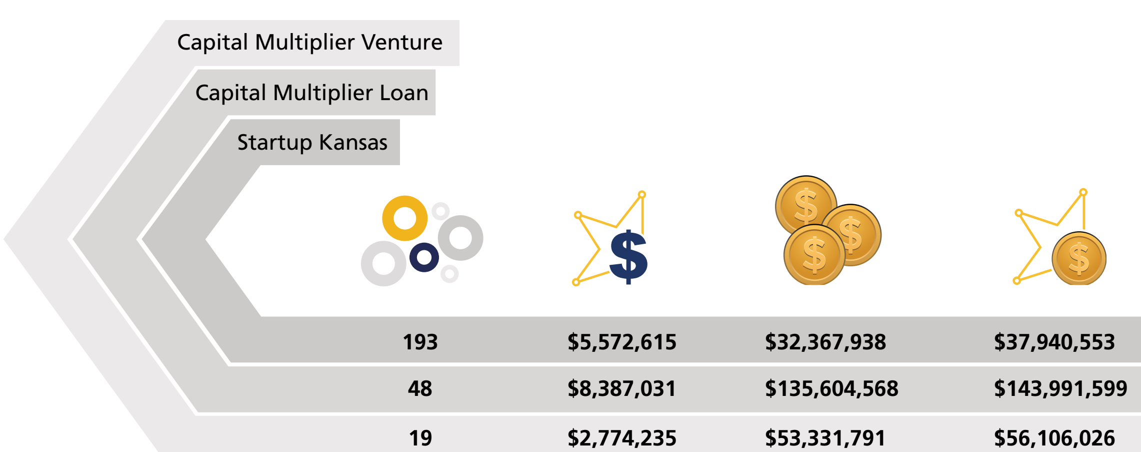


FIGURE F.
NetWork Kansas Reports Out to the Community on a Regular Basis with Data on Referrals, Website Visits and Presentations, as Well as Its Investment Program Statistics.



	Businesses	NetWork Kansas Funds	Leveraged Funds	TOTAL
Startup Kansas	193	$5,572,615	$32,367,938	$37,940,553
Capital Multiplier Loan	48	$8,387,031	$135,604,568	$143,991,599
Capital Multiplier Venture	19	$2,774,235	$53,331,791	$56,106,026

financing, network interconnectivity, STEM workforce, Inc. 500/5000 companies. This data will give Kansas City ongoing benchmarks to help measure the number of companies being created, the depth of the entrepreneurial ecosystem through the support they receive – talent, funding, and resources – and how that support, in turn, creates sustainable growth. (Figure H)

DRIVING THE ECOSYSTEM METRICS:

- Data reports
- Leveraged funding $$
- New programs
- Large scale collaborations among partners
- Jobs, starts, debt/equity, sales
- Key ecosystem metrics: density, connectivity, financing, talent and growth

Making and measuring impact in a community requires commitment to a process and patience for the process to progress. By building, activating, and leveraging a network, communities can drive positive change for entrepreneurs and have the data to measure that change.

Making and measuring impact in a community requires commitment to a process and patience for the process to progress. By building, activating ,and leveraging a network, communities can drive positive change for entrepreneurs and have the data to measure that change.

FIGURE G.
Excerpt from Kansas City's We Create Capital Report.

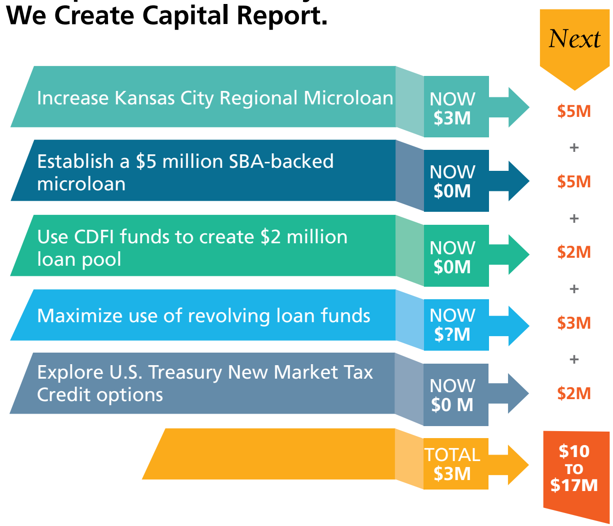
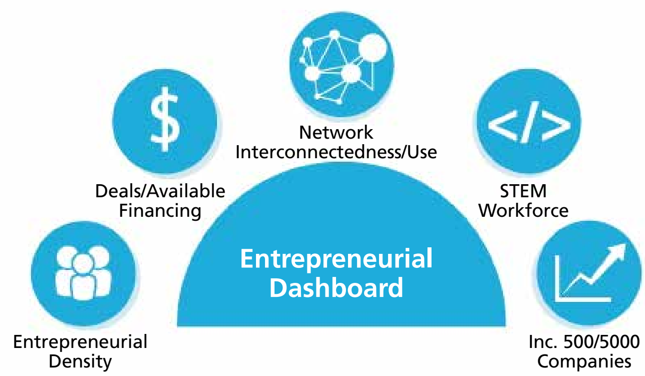


FIGURE H.
The Entrepreneurial Dashboard.



extending foreign trade
ZONE STATUS TO A SINGLE MANUFACTURER

By Troy Post, CEcD

THE ECONOMIC DEVELOPER'S ROLE IN THE SUBZONE DESIGNATION PROCESS

Subzone designation, a Foreign Trade Zone (FTZ) classification existing under the auspices of the U.S. International Trade Administration (a division of the U.S. Commerce Department), can be a critical tool in maintaining the viability of American manufacturers that import components for a finished good. Although the designation has been available for a number of decades, subzones may not be known to many small and mid-size manufacturers in the U.S. economy. This article explains the FTZ program and the subzone designation. It suggests actions that a local economic development organization can take to ensure that its local manufacturing base takes advantage of the benefits afforded by this program.

INTRODUCTION

As communities across the nation grapple with the increasing challenges of helping businesses stay competitive, especially those in the manufacturing sector, local economic developers should leverage tools and programs already available for use. One such program, which has been in existence for decades, is **Foreign Trade Zone** (FTZ) status under the U.S. International Trade Administration (ITA). By operating within such a zone, a manufacturing or assembly operation can defer part, or even all, duties charged on the import of components for manufacturing – a result which can better position the firm for competition in the global market, while increasing its viability in the local economy. This article provides a brief overview of the FTZ program and outlines the steps that a local economic developer can take to assist a company seeking subzone classification under the program.

WHAT IS A FOREIGN TRADE ZONE?

The FTZ program, as regulated by the U.S. Commerce Department through the ITA, was created in 1934 specifically to aid American-based companies competing in international trade. Today, there are more than 250 general purpose FTZs in the nation.[1]

To offset a competitive advantage enjoyed by companies in other nations – namely, the ability to access cheap materials without payment of an import tax or restrictions on the number and type of materials brought into a country – the FTZ program makes imported materials (such as raw materials or finished goods considered as components) duty-free, provided that they are used in the manufacturing process to produce a "new" good. Thus, an assembler of automobiles could import certain goods or finished products like drivetrains or engines made abroad and avoid paying an import tax, as long as those goods and component products were used to manufacture a new good – in this case, an automobile.

But mere proximity to a FTZ does not allow a company to enjoy the benefits of the program. The manufacturing or assembly activity utilizing these imported components must operate within a designated FTZ area, hence the nomenclature "zone."

To offset a competitive advantage enjoyed by companies in other nations – namely, the ability to access cheap materials without payment of an import tax or restrictions on the number and type of materials brought into a country – the FTZ program makes imported materials (such as raw materials or finished goods considered as components) duty-free, provided that they are used in the manufacturing process to produce a "new" good.

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These zones are geographical areas considered by the federal government to be, in effect, outside the bounds of the U.S. Customs & Border Protection (CBP) office and its taxing authority,[2] although the CBP is involved in FTZ monitoring and compliance. Within that designated zone area, select categories of merchandise can be imported without undergoing formal U.S. Customs protocol for the payment of import taxes.

Duty-free status may also be accorded to certain items salvaged, repackaged, cleaned, or processed in an FTZ.[3] In those cases, duty payments are not levied until goods are brought out of the FTZ designated area and shipped for sale in the domestic market.

Operating within an FTZ can have other benefits for a manufacturer or assembly operation, such as:

- Reducing or eliminating duties on materials subject to defect, damage, waste, or scrap;
- Providing unlimited time for inventorying finished goods without a duty payment, thus allowing the firm to determine the best time for introducing goods to a market;
- Reducing or eliminating delays in clearances from the CBP;
- Identifying sub-standard goods to be destroyed or returned without duty payments, through quality control inspections while goods are within an FTZ;
- Alleviating duties owed on the intra-FTZ transfer of merchandise; and
- Suspending federal quotas or restrictions on certain imported products, in some cases.[4]

With each benefit listed above, the FTZ program can yield immediate savings and directly impact the cash flow of a manufacturing operation. But beyond aiding a particular company, the presence of a FTZ can benefit the local community as well. Being aligned with a FTZ is an important consideration used by many manufacturing firms to determine whether to locate or expand within a particular community. The presence of an FTZ, or affiliation with one, can demonstrate to prospect firms that a community has companies actively engaged in the global economy. That, in turn, can help brand the community as an international business location and potentially drive more commerce to the area.

THE ROLE OF THE CBP

Integral to the operation of the FTZ program is the oversight provided by the U.S. Customs and Border Protection (CBP) Office. The CBP is responsible for monitoring activity within a designated FTZ. In that regard, the CBP reviews every application for a zone designation. And since all goods and merchandise located within a zone fall under the control of the CBP, it may conduct on-the-spot inspections and reviews to determine compliance with federal regulations, once an application has been approved. For more information on the CBP, visit www.cbp.gov.

Being aligned with a FTZ is an important consideration used by many manufacturing firms to determine whether to locate or expand within a particular community.

IS A "FREE TRADE ZONE" THE SAME AS A "FOREIGN TRADE ZONE?"

Occasionally, the word "free" is substituted for "foreign" in discussions on FTZs. However, a **free trade zone** generally refers to an area occupied by U.S. companies abroad, in which quotas for goods or taxes on goods imported into foreign nations are eliminated or relaxed due to less regulation by those state governments.[5] These free trade zones are designed to encourage capital investment in those countries, which can lead to greater job and income opportunities for its citizenry. Firms can move into a free trade zone, produce a product, then distribute the finished good – either domestically or internationally – without being taxed or restricted in the number of goods produced.

While a free trade zone is similar in concept to that of an FTZ, the word "foreign" should be used when discussing the attributes of the ITA's program for manufacturers. This distinguishes it as a domestic program, applicable to lands and territories located within the U.S. and regulated by the CBP.

GENERAL PURPOSE ZONE

There are two types of foreign trade zone classifications in the United States. The first is a **general purpose zone**, or GPZ, which may be sponsored by a state or local government, a transportation authority, or even an economic development group.[6] Once an application for this classification has been approved by the U.S. Foreign Trade Zones Board, the sponsoring entity becomes the "grantee" of the designation and is permitted to operate an FTZ.[7]

These GPZ designations may cover multiple facilities within a particular area, although the size (in acres or square feet) can vary. They may also include public facilities or developments used by more than one company, such as an industrial park or a seaport.

In the city of Savannah, Georgia, for example, the Savannah Economic Development Commission operates FTZ #104, which includes space within the Savannah International Airport complex, along with locations scattered among existing buildings and available land in several adjoining counties in Georgia.[8] It is a general purpose zone used by multiple firms to ship product in and out of the port facilities in Savannah, the local airport, and through the highway corridors surrounding that particular metro area.

In 2009, the U.S. Commerce Department instituted a new, optional management process for FTZs, known as the Alternative Site Framework (ASF), which essentially produced two types of GPZ site designations.[9] One of those designations, **magnet site** (or magnet GPZ site), refers to an area or building property or properties pre-designated by a FTZ grantee to serve multiple operators.[10] Magnet sites include industrial parks and logistics centers, and can vary greatly in size. In Indiana, for example, magnet sites range from more than 4,800 acres at the Indianapolis International Airport Complex to 123 acres contained within the Eagle Point Business Park in the city of Anderson, located to the northeast of Indianapolis.[11]

These sites are attractive to distribution and warehousing firms in particular, since they are not required to go through a formal application process for FTZ participation, given that the site has already been qualified by the grantee for FTZ benefits. Manufacturers may also take advantage of a magnet site, but a separate application to the regulatory body (the U.S. Foreign Trade Zones Board) is required for those users, referred to as "production authority."[12] Regardless, the process for a manufacturer applying for FTZ program participation in a magnet site can still be less time consuming and less costly than seeking a subzone designation, the second classification of FTZs in the U.S. and one described later in this article.

The second type of GPZ site designation, **usage-driven sites** (or usage-driven GPZ sites), are areas dedicated to a specific company. Rather than accommodating multiple users scattered throughout many spaces inside a defined service area – as in the case with magnet sites – the usage-driven site is tied to one company and its affiliates. It is limited to the space solely needed by that company for the activities permissible within an FTZ.[13] Such was the case for an electrode manufacturing company in the city of Peoria, Arizona, which received approval in 2014 for a user-driven site within a 120,000 sq. ft. facility under FTZ #277.[14] These user-driven sites provide greater flexibility for firms that cannot move to space within a magnet site and are most often used by companies for warehousing product and operating distribution hubs.

Photo Credit: Farm Assist

Syngenta crop protection products.

WHAT IS A "FREE PORT?"

To reduce business costs, some states offer personal property tax incentives for manufacturers. Operating within a "free port" area can make it possible for manufacturers located within a particular state to reduce or eliminate personal property taxes levied by local or state governments on products made in that state and stored for shipment outside the borders of that particular state. Though similar to a FTZ's ability to defer or exempt taxes, "free ports" do not provide relief from federal tariffs or duties. Read how Macon County, Georgia, uses this incentive at: http://www.maconcountyga.gov/freeport-exemption.cfm.

THE SIXTY MILES OR NINETY MINUTES RULE

Establishing a general purpose zone involves several requirements. Two key criteria include the proximity of the proposed GPZ to a port of entry into the U.S. and the submittal to the U.S. Foreign Trade Zones Board of a "demonstration of benefit," showing the economic impact of a FTZ on the community where such a designation would be granted.

Since the FTZ program is centered upon the import of products and goods into the U.S., all FTZs must be located within a certain radius of an international port of entry (typically an air or seaport) staffed by a CBP office. This provision aids personnel in conducting their work as inspectors and enforcers of import laws and regulations.

Known as the **Sixty Miles or Ninety Minutes Rule**, a FTZ must be located within either sixty (60) miles from the closest CBP port of entry, or within a ninety (90) minute drive.[15] Although some discretion remains with CBP officials to determine precisely what constitutes a 90-minute drive (depending upon speed limits, highway infrastructure, and congestion/traffic patterns), it is likely that any community located substantially more than 60 miles *by roadway* from a CBP office will have difficulty in establishing a FTZ.[16]

If the distance rule can be met, then a **Demonstration of Benefit** statement must be created. Typically, this document describes the local economy, including the identification of firms or clusters of firms that are engaged in international trade or could be interested in such activity, but for the existence of the FTZ program.[17] It also details how the FTZ would impact the community through those firms, but not adversely impact U.S. commerce practices.[18] The local economic developer can be especially helpful in providing information on the local economic base to an entity seeking the FTZ designation.

THE SUBZONE PROGRAM

A second type of foreign trade zone in the U.S. is the **subzone**, or SZ classification. A SZ is a special purpose FTZ site for use by one company for a limited purpose, such as the assembly of a product or the manufacturing of a line of products.[19] In Louisiana, for example, a recently-approved subzone application covers a facility used by the global agribusiness firm Syngenta for producing crop protection products, such as herbicides and insecticides.[20]

Cargo ships at Port Canaveral, Florida.

To establish a subzone, requests are made directly to an existing GPZ, which in turn, files a request with the U.S. Foreign Trade Zones Board, asking for permission to reorganize the GPZ's boundaries to include the new proposed service area or site. The request to the GPZ identifies the proposed service area and describes how it complies with the Sixty Miles or Ninety Minutes Rule.

The subzone status offers all the advantages of the FTZ program, but – unlike a user-driven GPZ site – involves a single firm's location, where the relocation of that manufacturer to a GPZ site is not practical or desired. (User-driven sites, though tied to one company, can exist in more than one area.) Today, there are more than 400 subzones located throughout the U.S.[21] In some FTZs, a number of subzones exist; in others, like FTZ #136 in Port Canaveral, Florida – which has six GPZs – there are only two SZ operators. [22]

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Applying for a new SZ consists of several requirements, beginning with a ***letter or executive summary***, which identifies the company and explains why the application would benefit the company and the U.S. economy.

A ***statement of economic justification*** provides a compelling economic reason for why the existing GPZ should modify its service area. There is no template for this, but generally it details the company's operation and its industry, including:

- Challenges and strengths facing the firm;
- Employment size and market share;
- Why the operation could not be supported elsewhere;
- Whether the company has other plant sites or locations in the U.S. or overseas;
- How the designation would affect purchasing plans;
- Current annual production at the plant site seeking the designation;
- Identification of major competitors and the industry's competitive factors; and
- Estimated total savings to be realized by operating under the designation.[23]

In short, the equivalent of a corporate business plan is provided, much as if the firm was seeking financial assistance from a conventional lender.

Augmenting this economic justification statement, ***information on the local economy*** provides an overview of current trends and developments affecting it. This identifies the local economy's strengths and weaknesses, and how the designation would help the region maintain economic vitality.

A ***site description*** identifies the proposed SZ's acreage or square footage (if a single structure), improvements upon the land (i.e., buildings), and any planned or existing activities at the site.[24] This also includes a legal description of the property to be designated; a survey is recommended.[25]

In lieu of a survey, ***mapping data*** can be submitted, showing the boundaries of the property and its adjoining uses.[26] This need not be U.S. Geological Survey (topographic) map data, but rather mapping that shows major roadways, landmarks, and communities.

A SUBZONE EXAMPLE

The LEEVAC shipyard facility in Jennings, Louisiana, is an example of a subzone. Located on the west bank of the Mermentau River, the site has a total operating area of 180 acres, and is fully equipped to handle the construction of tugboats, barges, and other offshore supply vessels. The company, which dates to 1913, operates three shipyards in Louisiana. For more information on LEEVAC and its Jennings operation, visit the firm's website at www.leevac.com.

The ***operation and financing of the SZ*** details the security measures to safeguard the firm's products and guarantee that no non-zone items are moved to the designated area.[27] This is especially critical, since the SZ will be subject to code enforcement by the closest CBP office, which has a legal obligation to ensure that zone boundaries and records are properly maintained.

The applicant must also certify that it has the authority to request the designation, which includes evidence that the organization is a legal entity and is permitted by law to participate in the FTZ program. In most states, a secretary of state's office can provide a ***certificate of corporate standing*** to validate the entity's existence. Resolutions from the applicant, citing the firm's duly appointed representatives and its ability to make program commitments, are suggested.[28]

Lastly, the applicant provides ***information on the type of products and components*** that will be stored within the proposed designated area. This includes finished products that will be made, along with finished goods intended for export to international markets. The Harmonized Tariff Schedule of the U.S. (HTSUS), the source for determining customs duties on goods brought into the country, contains the HTSUS codes for goods that would be stored in the SZ.[29]

THE ROLE OF AN ECONOMIC DEVELOPER IN A SUBZONE APPLICATION FOR A MANUFACTURER

Given the tax-deferred advantages of the FTZ's subzone designation to a manufacturer, it should be the task of every economic development official to determine if the program could be used to help manufacturers in the economic developer's specific service area. Beyond networking with the local manufacturing base – and knowing which firms might benefit from the designation, given the amount of imported materials used – the initial determination for community participation should be based upon the compliance with the Sixty Miles or Ninety Minutes Rule, regarding proximity to a CBP port of entry.

This determination is relatively easy for a local economic developer to make, given that all such CBP office locations are identified on the agency's website.[30] In some cases, a potential SZ located outside the Sixty Miles or Ninety Minutes radius may still qualify if the port director at the closest CBP office determines that proper oversight of import administration procedures is possible.[31]

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For additional information on the FTZ program specifically and on similar free trade zones worldwide, visit these websites:

- http://enforcement.trade.gov/ftzpage/ - U.S. Foreign Trade Zones Board, U.S. Commerce Department, International Trade Administration
- www.naftz.org - National Association of Foreign Trade Zones
- www.freezones.org - World Free Zones Convention
- www.cbp.gov – U.S. Customs & Border Protection

Next, the local economic developer should identify and contact a FTZ that could potentially expand its service area to include a new SZ. This necessitates research on existing FTZs in a particular state and correspondence with a FTZ to determine its interest in receiving a SZ application.[32] If more than one FTZ could service the local economy, the local economic developer should contact the U.S. Foreign Trade Zones Board for direction.

Communicating the advantages of the program to the community's existing manufacturing base should be the next task for an economic development office (EDO). That might include hosting networking events between local companies and officials from an existing FTZ or conducting seminars on FTZs, to increase awareness of the program. It could also involve communicating updated information on the FTZ program, as new regulations or changes are introduced.

Costs are involved in filing a SZ application. In determining a manufacturer's interest in proceeding, the local EDO could assist a prospective applicant with understanding the fees required. The local economic developer might even help the company identify private sector consultants in the field, individuals or firms that provide expertise in the application process, particularly for applicants unfamiliar with federal programs or the documentation typically required. Many of these consultants provide services after the application process has been completed, helping the company monitor and manage its SZ once designation has been received.

If a company wants to proceed with submitting a SZ application, the local economic developer could assist the company with several aspects of that process, most notably through data compilation for the statement of economic justification and the report on the local economy. In this regard, generating a written **economic assessment** on the local economy – a task that all EDOs should engage in periodically – should provide the applicant with the relevant information to document the current state of the local economy and the impact that the SZ status could have on it. These assessment reports generally include notations on:

- Local economic conditions (select statistical information on the market);
- Current economic activity (recent local business activity, including new business announcements);
- Future local trends and developments (a forecast of expected or planned developments);
- Community attributes (the area's "quality of place"); and
- Development capacities (resources/incentives available to induce business investment in the area).[33]

Another key role that the local economic developer plays in the application process is help with assembling letters of support from affected jurisdictions and other community partners concerned with the area's economic vitality. These provide evidence to the FTZ that the economic impact of the designation would extend beyond a single company. The request for letters might also help spread awareness of the FTZ program, further increasing the likelihood that other companies in the community would learn of the program's advantages.

The FTZ, as part of its application review process, may ask the EDO to assist it with surveying existing manufacturers in an area, to determine the level of export activity currently existing in the community. This is a critical part of the FTZ analysis, given that it must make a case before the U.S. Foreign Trade Zones Board to amend its service area to accommodate the applicant business. Considering the interaction typical between an EDO and the local business community, this is the type of information that an EDO has readily available, if it practices ongoing networking efforts and retention programs.

In fact, helping a company obtain a SZ designation should be part of a larger service offered by an EDO – assisting companies in developing an export program. When firms export, they import money into the local economy. To facilitate this, the EDO can offer an export assistance program for firms on how to develop markets internationally and how to use tools like FTZ status to make exporting activities competitive. In this regard, the EDO could coordinate information from a number of program providers, from state international trade offices to federal agencies (such as the U.S. Export-Import Bank), and make it available to local firms.

The FTZ program can be very beneficial to manufacturers or assembly operations that import raw material or components used in producing a finished good, by deferring or avoiding tariff duties. One option, instead of creating a new FTZ, is to work through an existing FTZ to have a site-particular designation of a subzone (SZ) – a designation which permits a company to enjoy the benefits of being located within an FTZ.

CONCLUSION

The FTZ program can be very beneficial to manufacturers or assembly operations that import raw material or components used in producing a finished good, by deferring or avoiding tariff duties. One option, instead of creating a new FTZ, is to work through an existing FTZ to have a site-particular designation of a subzone (SZ) – a designation which permits a company to enjoy the benefits of being located within an FTZ. The role of an economic developer is to determine if a SZ is attainable and then to assist a manufacturer or assembler seeking the designation with the application process. If a SZ designation is awarded, the money saved by a firm will likely be reinvested into the company, thereby improving its market position and retaining – if not creating – jobs for the local economy.

ENDNOTES

[1] "A Positive Force in Economic Development: The U.S. Foreign Trade Zone Program;" 2003. Booklet published by the National Association of Foreign Trade Zones (NAFTZ). Pg. 2. See also www.naftz.org.

[2] "A Positive Force in Economic Development," NAFTZ. Pg. 1.

[3] "A Positive Force in Economic Development," NAFTZ. Pgs. 1-3.

[4] Taken from pamphlet entitled "The U.S. Foreign Trade Zone Program;" (c) 2007. Published by National Association of Foreign Trade Zones (NAFTZ). For more specific information on these cases, consult a U.S. Commerce Department representative or international trade official.

[5] "Free Trade Zones: What Are They, and How Can Small Businesses Benefit;" 2010. Published electronically by U.S. Small Business Administration, via: http://www.sba.gov/blogs/free-trade-zones-what-are-they-and-how-can-small-businesses-benefit

[6] Definition of "Zone Grantee" under "Glossary of FTZ Terms," taken from www.enforcement.trade.gov/ftzpage/grantee/glossary.html. The term "general purpose zone" (GPZ) appears less frequently since the 2009 administrative change that created magnet and user-driven sites, but "GPZ" is still referenced by many grantees when describing a FTZ.

[7] Definition for "Zone Operator" under "Glossary of FTZ Terms," visible at www.enforcement.trade.gov/ftzpage/grantee/glossary.html.

[8] The FTZ # 104 service area includes the Georgia counties of: Bulloch, Bryan, Chatham (Savannah), Effingham, Evans, Liberty, Long, and Screven. See www.enforcement.trade.gov/ftzpage/asf/ftz104.html for more information.

[9] "What Is The ASF?" under "Frequently Asked Questions (FAQs)," taken from http://enforcement.trade.gov/ftzpage/info/ftzstart.html.

[10] Definition of "Magnet Site" under "Glossary of Terms," visible at www.enforcement.trade.gov/ftzpage/grantee/glossary.html.

[11] The State of Indiana's IN Zone program. See http://inzone.org/types-of-ftz/magnet-gpz-sites/.

[12] "How Do I Know If A Zone Is Right For My Community/Company?" under "Frequently Asked Questions (FAQs)," taken from http://enforcement.trade.gov/ftzpage/info/ftzstart.html.

[13] Definition of "User-Driven Sites," under "Glossary of FTZ Terms," visible at www.enforcement.trade.gov/ftzpage/grantee/glossary.html.

[14] http://www.peoriatimes.com/news/article_d3b01dec-e678-11e3-aa16-0019bb2963f4.html.

[15] "Where Can a Zone Be Located?" under "Frequently Asked Questions (FAQs)," taken from http://enforcement.trade.gov/ftzpage/info/ftzstart.html.

[16] "Where Can a Zone Be Located?" visible at http://enforcement.trade.gov/ftzpage/info/adjacency.html, under "Glossary of FTZ Terms." A proposed FTZ may also be required to be located within close proximity to a major transportation corridor, such as a Federal interstate highway or a regional airport. In that regard, a narrative detailing why a particular transportation mode is considered a "major transportation corridor" to a community may be necessary.

[17] "How Do I Know If A Zone Is Right For My Community/Company?" under "Frequently Asked Questions (FAQs)," taken from http://enforcement.trade.gov/ftzpage/info/ftzstart.html.

[18] The U.S. Foreign Trade Zone Board's Enforcement and Compliance office refers to this "demonstration of benefit" as the applicant's ability to show that a proposed zone will not meet a "convenience of commerce" for companies within the FTZ and adversely impact U.S. commerce practices.

[19] Definition of "Subzone," under "Glossary of FTZ Terms," visible at www.enforcement.trade.gov/ftzpage/grantee/glossary.html.

[20] "FTZ Board Expands Production Activity at Fragrance Facility, Approves New Subzone." http://www.strtrade.com/news-publications-FTZ-fragrance-subzone-Louisiana-071015.html.

[21] "A Brief History of the U.S. Foreign Trade Zones Program." http://www.foreign-trade-zone.com/history.htm.

[22] "FTZ 136 Fact Sheet," available at www.portcanaveral.com/cargo/FTZ.php.

[23] "What Information Do I Need and Why" visible at http://enforcement.trade.gov/ftzpage/info/whatandwhy.html. This webpage at the U.S. Foreign Trade Zones Board site provides a good checklist on the items to be submitted. The author also wishes to acknowledge Julie Brown with FTZ #26 for recommendations provided on the type of information needed from an applicant to document the economic justification argument for the designation.

[24] IBID.

[25] IBID.

[26] IBID.

[27] IBID. Referenced as "Industry Information" on the U.S. Foreign Trade Zones Board website.

[28] IBID.

[29] IBID.

[30] www.cbp.gov/contact/ports.

[31] "Where Can a Zone be Located?" visible at http://enforcement.trade.gov/ftzpage/info/adjacency.html, under Glossary of FTZ Terms.

[32] Consult the home page for Enforcement and Compliance (formerly "Import Administration") of the U.S. Foreign Trade Zones Board – visible at http://enforcement.trade.gov/ftzpage/index.html – for a listing of all FTZs and SZs by state.

[33] "Assessing the Community," Economic Development Strategic Planning, pp. 47-78. Published by IEDC, 2011.

tightening truck capacity

LOOMS OVER SHIPPERS

By Michelle Comerford

As the US economy continues to bounce back from the recession and business commerce grows, so does the demand to move products from suppliers to manufacturers to customers – mostly via truck. But recent burdens on the transportation industry are beginning to take a toll on trucking company carriers, and therefore, on "shippers" – or companies who rely on trucks to ship products.

In order to best support and attract the manufacturing industry, it is important for communities to understand how truck capacity constraints are impacting the distribution of products and look for ways to help companies alleviate these issues.

Source: www.hankstruckforum.com

The Sherwin-Williams Company, which owns and manages its own fleet of trucks and employs its own drivers, has found that offering drivers unique incentives helps retain them.

DEMAND FOR FREIGHT CONTINUES TO INCREASE

Trucks continue to be the preferred mode of shipping for most manufacturers and distributors in the US. According to the American Trucking Association (ATA), in 2014, trucks carried 9.7 billion tons of freight, or over 69 percent of tonnage carried by all modes of domestic freight transportation for retail and manufactured goods. Truck carriers collected over $680 billion in revenues, which was over 80 percent of total revenue in the domestic transportation industry. (The next highest utilized mode is rail, with approximately two billion tons, or 15 percent of the total.)

According to ATA, annual total tonnage in 2014 represents a 3.3 percent increase from 2013, with economic indicators continuing to point upwards going into 2015[1]. As US commerce continues to grow, freight tonnage will also continue to increase, requiring even more trucks to keep up with demand.

MORE LOADS THAN AVAILABLE TRUCKS

Truckload capacity is tight in the marketplace today. The graphic from DAT Solutions, an online freight marketplace and information provider, illustrates the number of loads requiring dry van trucks (i.e. a "normal" semi tractor trailer that one would typically see on the highway) and the number of trucks available, or the "Load-to-Truck Ratio," for each US state. As of December 2014, the US national average was 3.7 loads per truck, meaning for every 3.7 "orders" for a dry van truck, there was one truck available to move the load as demanded. The map illustrates the demand by state, which indicates some states have a ratio of 5.5 loads or more per truck.

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INCREASED FREIGHT DEMANDS AND NEW REGULATIONS ARE IMPACTING MANUFACTURING AND DISTRIBUTION INVESTMENT DECISIONS ACROSS THE U.S.

Economic developers can position their communities for manufacturing and distribution investment by better understanding the complexities of recent burdens on the transportation industry, investing in intermodal hubs, and providing assistance to trucking companies and shippers in their regions through workforce training, infrastructure improvements, and financial incentives. The communities that best understand and support these transportation issues will be among the most successful at business attraction in the future.

CHANGING NATURE OF CARRIERS

Adding even more fuel to the fire is a lack of cost certainty. Many companies that ship large volumes of product on a regular basis will contract with a major carrier(s) to handle their vast array of truck shipments. In the past, multiple year rate contracts were typically offered by carriers for large customers with consistent freight requirements.

"The role of carriers in the contract process has flipped," says Nick Pacitti, a partner with Sterling Solutions LLC, a supply chain consulting firm. "Carriers are in charge, sometimes walking away from business if it does not meet their thresholds for profitability or efficiency. Truck carriers are looking for less, but more profitable loads."

Today, most major carriers are only interested in short term contracts (typically less than a year) due to the changing nature of the trucking industry, changing costs and regulations, and other uncertainties. "Many contracts today are only one year, as carriers are becoming much more selective," says Pacitti.

WHY IS TRUCK CAPACITY GROWING TIGHTER?

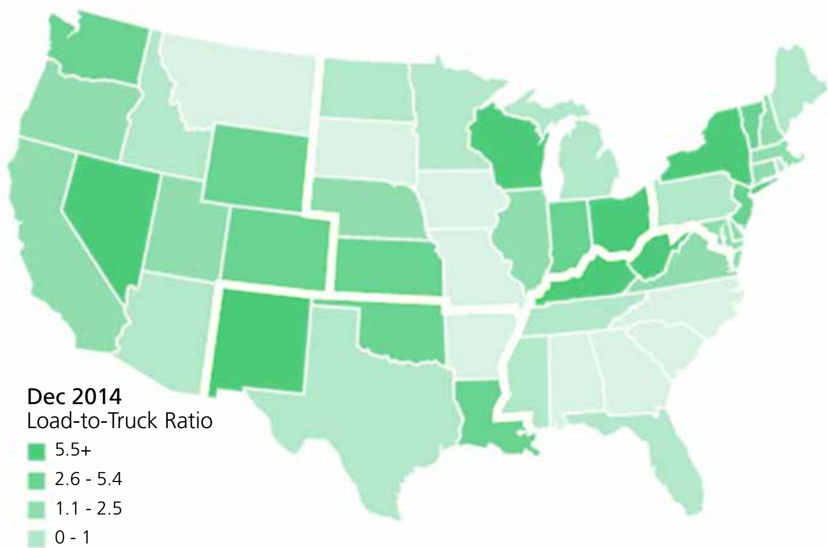
There are a number of factors driving the tight truckload capacity including:

1. **Driver Shortages**

   According to the American Trucking Association (ATA), the US for-hire trucking industry is currently experiencing a shortage of drivers. Despite the national unemployment rate being over 7 percent, the ATA estimates a current shortage of roughly 30,000 drivers, which can be attributed to a variety of reasons, including an aging workforce and changing quality-of-life (QOL) standards, wage stagnation, and regulatory issues.

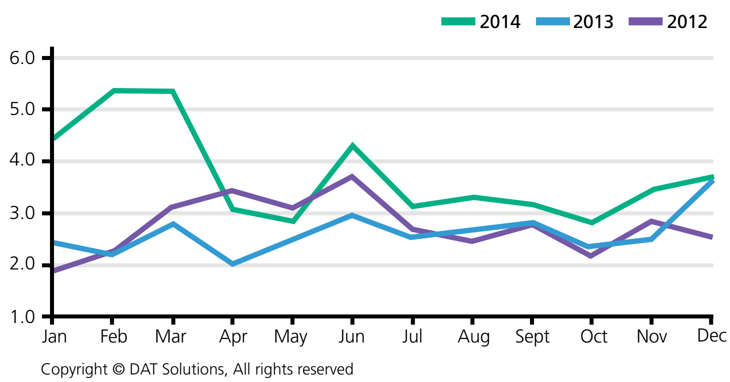
   Aging Demographics and Changing QOL Standards – According to the U.S. Bureau of Labor Statistics, the average age of a commercial truck driver is 48 years old, with approximately 21 percent

NATIONAL VAN DEMAND AND CAPACITY[2]



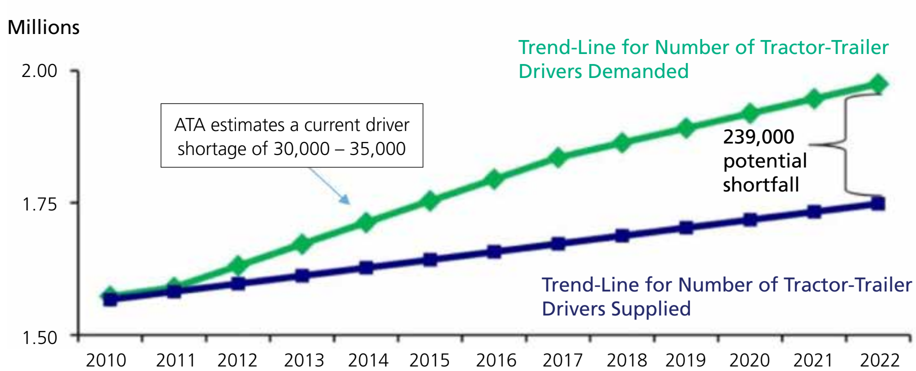
Source: DAT Solutions, DAT Trendlines, December 2014 Update

The second graphic illustrates the national average for the van-to-load ratio trend over the past three years. During this period, the ratio has continually been above 2.0, but was much higher in 2014 compared to the two previous years.



Source: DAT Solutions, DAT Trendlines, December 2014 Update

TRUCK CAPACITY GROWTH LIMITED BY DRIVER SHORTAGE



Source: American Trucking Association

According to the American Trucking Association (ATA), the US for-hire trucking industry is currently experiencing a shortage of drivers.

between 55-65 years old and fewer than 8 percent between 25-29 years old. Meaning, thousands of aging baby boomer drivers are nearing retirement, and the industry is struggling to fill those seats with next generation workers. Quality-of-life considerations are contributing to the lack of interest from the next generation to consider careers as over-the-road drivers. Being away from home for long periods of time and "living" on the road are lifestyles that next generation workers are not as interested in pursuing.

In response to this industry challenge, some companies are looking for creative ways to attract and retain drivers. The Sherwin-Williams Company, for example, which owns and manages its own fleet of trucks and employs its own drivers, has found that offering drivers unique incentives helps retain them. "In addition to competitive wages, we seek driver input on the design of our trucks," says Tim Knight, Senior Executive VP of Administration at The Sherwin-Williams Co., who says they solicit driver input on not only the design of the interior truck cabs, but also put drivers on the road to test different makes and models of trucks before making corporate purchasing decisions.

In addition to driver shortages, equipment shortages are also being felt on the trailer side, and even more prevalent in specialty trailers, such as refrigerated (reefer) trailers.

Source: http://www.fleetequipmentmag.com/vanguard-direct-chassis-introduce-new-reefer/

On top of that, Sherwin Williams has also modified its scheduling and routing of trucks to combat the driver quality-of-life issues. "The biggest factor in our driver retention is that we get drivers home on weekends," says Knight. "Offering these soft-cost benefits help keep our drivers happy," he says. "The cost of not having paint in our stores far outweighs the cost of providing these services to our drivers."

Wage Stagnation - Creative incentives are part of the puzzle, but nothing attracts workers like a good paycheck. Wages for tractor-trailer operators have historically been below the national average for all job types. However, the shortage of drivers is quickly pushing those wages up. For example, Schneider National, the largest privately owned US truckload carrier is hiring drivers in Alabama to help service its dedicated trucking business for customers in the South and is advertising pay as high as $64,000 per year, and upwards of $80,000 for specialty equipment drivers.[3] These wages represent well above the national average for a heavy tractor-trailer driver, which according to the Bureau of Labor Statistics (BLS) was $40,940 as of May 2013.

Creative incentives are part of the puzzle, but nothing attracts workers like a good paycheck. Wages for tractor-trailer operators have historically been below the national average for all job types. However, the shortage of drivers is quickly pushing those wages up.

Increased Government Regulations: In addition to time worked, drivers are now also subject to a revised Compliance, Safety, and Accountability program under the Federal Motor Carrier Safety Administration (FMCSA). The revised program includes a Safety Measurement System (SMS) to assess motor carriers and drivers across a variety of safety factors, including driver fitness assessments that consider driver health and medical information, alcohol/drug use testing, sleep-apnea evaluations, and other considerations. Although important to the safety considerations,[4] these increased measures over driver acceptance can also make it more difficult to find and retain over-the-road truck drivers.

Source: http://www.railnewyork.com/issues.html

The use of intermodal as a method of transportation to bring containers from ports to inland markets is on the rise, which can not only be more cost effective for long haul shipments, but also helps address truck driver shortages for long haul truck shipments.

2. Equipment Shortages

In addition to driver shortages, the industry is also experiencing shortages in equipment for both trailers and tractors, which have new regulations to abide by. For trailers, the shortage is true of dry vans, but also even more so for specialty equipment such as refrigerated trailers, tankers, flat beds, and other trailer types that handle special items. The reasons behind this trend include the following:

Increased Equipment Regulations – New Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Heavy Trucks as implemented by President Obama in 2010 have set some new engine efficiency and emissions standards for trucks model years 2014 - 2018. A second round of standards is currently being considered for model years beyond 2018. These standards will soon force trucks off the road to either be scrapped or retrofitted with new engines that meet the new standards. Older model trucks too costly to retrofit are then being scrapped, and potentially not replaced by new trucks which are more costly to purchase and maintain.

Demand for Equipment - Equipment shortages are also being felt on the trailer side, and even more prevalent in specialty trailers, such as refrigerated (reefer) trailers. At the same time, consumer demand is rising for more fresh food products which require transport by reefer trailer. This supply and demand dilemma is causing costs to rise at an even higher rate for reefer trucks, and an overall shortage of available equipment to transport freight.

3. **Regulatory Environment**

While some regulations are critical for transportation safety issues, a heavy regulatory environment can curtail truck productivity and efficiency. The following regulatory issues are affecting truck capacity in the marketplace:

New Hours of Service (HOS) Rules - Under new HOS rules, which are administered by the FMCSA, drivers are permitted to drive 11 hours before requiring a 10-hour break, with an overall maximum 14-hour work day. A 30-minute break period is required within the first eight hours on duty. The new rules also specify the maximum on-duty hours in a week is 70 hours, a decrease from the previous maximum of 82 hours, and that a driver must have at least 34 hours off-duty (with at least two rest periods between 1 and 5am) at the end of a week before coming back on.

These new rules make drivers less available, meaning less drive-time to move products. In addition, the complexity of accounting for these hours makes it more difficult for trucking companies to manage drivers, and therefore, be efficient with scheduling and load planning, costing time and money.

4. **Rising Fleet Costs**

Costs to purchase and maintain trucks and trailers have risen substantially as a result of increased government regulations. Consider this: a new truck-tractor in 2006 cost approximately $95,000, and by 2011, with the additional engine emissions requirements and other factors, truck-tractor prices rose to almost $125,000.

These growing costs are adding pressures to truck carriers, resulting in many smaller trucking companies closing their doors based on an inability to be profitable. "There is a lot of consolidation happening in the industry," says Pacitti. "Many of the little guys are going away. Four or five major carriers are doing the majority of business today."

Fewer truck carriers mean less overall trucks in the marketplace, which is also contributing to the supply and demand issues.

HOURS OF SERVICE (HOS) REGULATIONS IMPLEMENTED JULY 2013[5]

HOURS OF SERVICE (HOS) REGULATIONS – COMPARISON		
PROVISION	**PRIOR RULE**	**CURRENT RULE**
Limitations on minimum "34-hour restarts"	None.	(1) Must include two periods from 1am to 5am, home terminal time. (2) May only be used once per week, 168 hours, measured from the beginning of the previous restart.
Rest breaks	None except as limited by other rule provisions.	May drive only if 8 hours or less have passed since end of driver's last off-duty or sleeper berth period of at least 30 minutes. Does not apply to drivers using either of the short-haul exceptions in 395.1(e). [49 CFR 397.5 mandatory "in attendance" time for hazardous materials may be included in break if no other duties performed.]
On-duty time	Includes any time in CMV except sleeper berth.	Does not include any time resting in a parked vehicle (also applies to passenger – carrying drivers). In a moving property-carrying CMV, does not include up to 2 hours in passenger seat immediately before or after 8 consecutive hours in sleeper berth.
Penalties	"Egregious" hours of service violations not specifically defined.	Driving (or allowing a driver to drive) more than 3 hours beyond the driving-time limit may be considered an egregious violation and subject to the maximum civil penalties. Also applies to passenger- carrying drivers.
Oilfield exemption	"Waiting time" for certain drivers at oilfields (which is off-duty but does extend 14-hour duty period) must be recorded and available to FMCSA, but no method or details are specified for the recordkeeping.	"Waiting time" for certain drivers at oilfields must be shown on logbook or electronic equivalent as off-duty and identified by annotations in "remarks" or a separate time added to "grid."

Source: FMCSA-ADD-13-006C Revised October 2013 www.fmcsa.dot.gov/hos

HOW IS TIGHTENING TRUCK CAPACITY AFFECTING INVESTMENT DECISIONS?

The transportation of raw materials and finished goods is often one of the most significant variable operating cost factors for manufacturers and distributors – and also one of the biggest drivers of location strategy decisions. Tightening truck capacity means that more manufacturing plant and distribution center location decisions are being based on truck availability.

"Being in northern Wisconsin – as one of our clients is based - is problematic on so many fronts: lack of consistent truck capacity, bad weather, higher rates, and less dependable service," said Pacitti. Plants and distribution centers have to be much more sensitive to truck lanes and terminals, as well as availability of alternative transportation modes such as rail, than ever before.

Proximity to Carrier Hubs – Many shippers today considering new investments have a new location criterion on their lists: proximity to a major truck carrier hub. A location that is convenient for the carriers will ensure minimized cost, reliable and consistent transportation service, and improved customer service for a shipper, as last minute load orders are more likely to be accommodated.

Availability of Alternative Modes – The tightening truck market is also driving shippers to consider alternative modes of transportation, mainly rail service. Class 1 railroads have been investing billions of dollars over the past few years to upgrade rail lines and construct new infrastructure. Some site selection projects are now requiring rail service to be at a site or building, with the intention to utilize rail service immediately or hold as a possibility for the future.

Intermodal Opportunities – For many shipments, door to door rail is not possible due to infrastructure constraints, and some companies are hesitant to limit their location options to only rail-served sites. That is where intermodal service comes into play, and why locations in proximity to intermodal terminals are also on the rise. Long haul shipments that require trucking long distances across the country can instead be shipped in a container via rail to an intermodal terminal that is closer to its destination. From there, a truck can pick up the shipment for delivery to a dock door (typically within a day's drive or less, which not only saves money, but is also a more desirable distance for a truck driver and helps combat driver attraction issues).

Implementing and supporting truck driver training programs at your local community colleges and technical schools will help fill some of the driver vacancies and future vacancies the industry is experiencing.

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Distribution Network Design – The impending truck capacity shortage is contributing to the trend of distribution networks consisting of more, smaller, regional serving distribution center operations. This design not only provides faster and more efficient reach to regional markets, it also allows carriers to route drivers home more frequently (vs. long haul shipments) which in turn helps combat driver retention issues.

HOW CAN ECONOMIC DEVELOPERS HELP?

For economic development professionals seeking to attract and retain investment in their respective communities, it is important to not only be aware of these trends and pressures on the trucking industry, manufacturers and distributors, but also seek opportunities to help alleviate issues. Below are some ways to help:

1. **Support for Local Driver Training Programs –** While skilled labor shortages have been at the forefront of discussion topics over the past few years, rarely do these discussions include the shortage of certified truck operators. As discussed above, wages and hours for these jobs have vastly improved, making them more desirable for qualified individuals to pursue. Implementing and supporting truck driver training programs at your local community colleges and technical schools will help fill some of the driver vacancies and future vacancies the industry is experiencing. For example, Cuyahoga Community College, which works with many local companies in the Cleveland, OH, metro area for technical training, offers a truck driving academy program for CDL licensure.

2. **Investment in Highway Infrastructure –** Investing in infrastructure, both locally and regionally, is an invaluable way to ensure ease of access in and out of your community, and connectivity to other markets for both cars and trucks.

   Over the past eight years, the state of Indiana has made some important investments in its transportation infrastructure after receiving a windfall from the "Major Moves" plan. In 2006, then Governor Mitch Daniels made an important (albeit, controversial!) decision to lease the toll roads in the state to a foreign firm in exchange for a one time payment of $3.85 billion. Daniels used the income from the lease to finance a backlog of public transportation projects and created a $500 million trust fund to generate revenue for ongoing highway maintenance. Those projects have helped to upgrade transportation infrastructure and connectivity through the state by extending interstates and/or upgrading some state highways to interstate quality roads. The state will soon look like a "spoke and wheel" - with Indianapolis in the center, and eight directional highways pointing to various regions in the state and beyond.

   This type of improvement not only makes travel easier for residents and visitors, but also makes truck travel much more efficient, thus saving miles and time, and therefore, money for shippers.

3. **Investment in Intermodal Hubs –** As discussed above, rail service is on the rise as a mode of transport. Although most of the major railroads are investing in intermodal hubs as break bulk points and transfer yards, many times, these investments also require support from the states and local communities to make them happen. Whether it is regulatory, financial, permitting, or a combination of all, get connected and involved in the planning of these hubs to help expedite implementation. The INland Logistics Port in Kingsbury, IN, is a good example of various community partners coming together for an investment. The site is now "certified" as part of the CSX Select Site program as a rail served site, and CSX is currently in the process of setting up a "Green Express" service which will bring perishable products from the Port of Tampa on a direct and high speed rail line to the Kingsbury site. A developer is planning to invest in a refrigerated intermodal cross-dock facility at the Kingsbury site, where products will be shipped via truck to customers. The project has taken a coordinated effort among CSX, the developer, the local community, and officials at the Port of Tampa.

4. **Support for Carrier Hubs –** Many trucking companies have regional serving truck terminals where trucks and equipment are based. Be familiar with what carrier hubs are located in your region and provide outreach and support for them as an important service provider for your manufacturers. Consider including representatives from these firms in your local manufacturing roundtable events, and other networking events to help link your local distributors with these resources. For example, Old Dominion Freight Line, a national LTL carrier, has over 223 service hubs across the US, including at least one in every one of the 48 contiguous states. If one is near you, reach out and see how you can work together to support companies in your region.

   In addition, if a carrier is considering your community for a trucking hub, pursue those investments as you would any manufacturer or distributor in a site selection process. A carrier hub will not only be creating jobs in your community, but may also help attract future manufacturing and distribution investment.

The INland Logistics Site in Kingsbury, Indiana, is the proposed location for a perishable produce intermodal yard where fresh produce will be brought in from the Port of Tampa via a high speed, direct CSX train called the "Green Express."

Source: http://www.csx.com/index.cfm/customers/industrial-development/site-search/csx-select-sites/detail/?i=1DA71C74-C9C3-ED74-EC1212A6BDB259B0

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5. **Financial Incentives –** Financial incentives that help reduce other operating costs for a manufacturer or distributor may help offset rising transportation costs and make a community more viable if all other location criteria are met. Communities that have the ability to be creative with incentives may also consider offering special support in the form of grants or loans to assist with operating costs facing a new or existing company.

WHAT DOES THE FUTURE HOLD?

While drones and automated vehicles have been cited as the future of transportation of goods, for the foreseeable future, expect the industry to still rely on trucks for all or part of a delivery model.

Economic developers can position their communities for manufacturing and distribution investment by better understanding the complexities of recent burdens on the transportation industry, investing in intermodal hubs, and providing assistance to trucking companies and shippers in their regions through workforce training, infrastructure improvements and financial incentives. The communities that best understand and support these transportation issues will be among the most successful at business attraction in the future.

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ENDNOTES

1. Source: http://www.trucking.org/article.aspx?uid=bd7d46b8-e0a6-4bd7-aba8-5b95220c6304
2. Source: DAT Trendlines http://www.dat.com/resources/trendlines/van/demand-and-capacity; Load-to-Truck ratios represent the number of loads posted for every truck posted on DAT Load Boards. The ratio is a sensitive real-time indicator of the balance between spot market demand and capacity.
3. Source: http://www.joc.com/trucking-logistics/labor/truckload-carriers-compete-drivers-us-freight-demand-heats_20140827.html
4. Source: https://ai.fmcsa.dot.gov/sms/
5. Source: Federal Motor Carrier Safety Administration, www.fmcsa.dot.org/hos