



Building Strong Clusters for Strong Urban Economies:

Insights for City Leaders from
Four Case Studies in the U.S.

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The Significance of Clusters to Urban Economic Growth

Every metro area in the U.S. has strong industry clusters that are readily identifiable and reflect the unique competitive advantages of the region—Oil and Gas in Houston, Automotive in Detroit, and Financial Services in New York City are just a few examples. These clusters represent the backbone of their metro economies. The importance of clusters to regional competitiveness and economic performance was first established in the 1990s. Since then, research has shown that the co-location of businesses in clusters increases the productivity of companies and job creation, drives innovation, stimulates the formation of new businesses, and supports the survival and growth of small businesses.¹

Clusters can also further catalyze economic growth by providing a framework for organizing disparate local and regional public policies and investments directed at economic development (Figure 1). However, this has proven to be an elusive goal for many cities as they struggle to accelerate the growth of targeted clusters that they believe will drive future economic prosperity. *Building Strong Clusters for Strong Urban Economies* was written to help city leaders achieve this goal by providing actionable strategies to galvanize their cluster building efforts. The report’s insights were informed by cluster theory and practice, and an in-depth analysis of cluster strategies across the U.S. The report highlights actionable insights from four constructive case studies: the San Diego Regional Innovation Cluster (p. 4), BioSTL in St. Louis (p. 6), the Chicago Regional Growth Initiative (p. 8), and ProsperityNOLA in New Orleans (p. 10). We also offer six recommendations (p. 12) to help guide city leaders in designing high-impact cluster growth strategies.

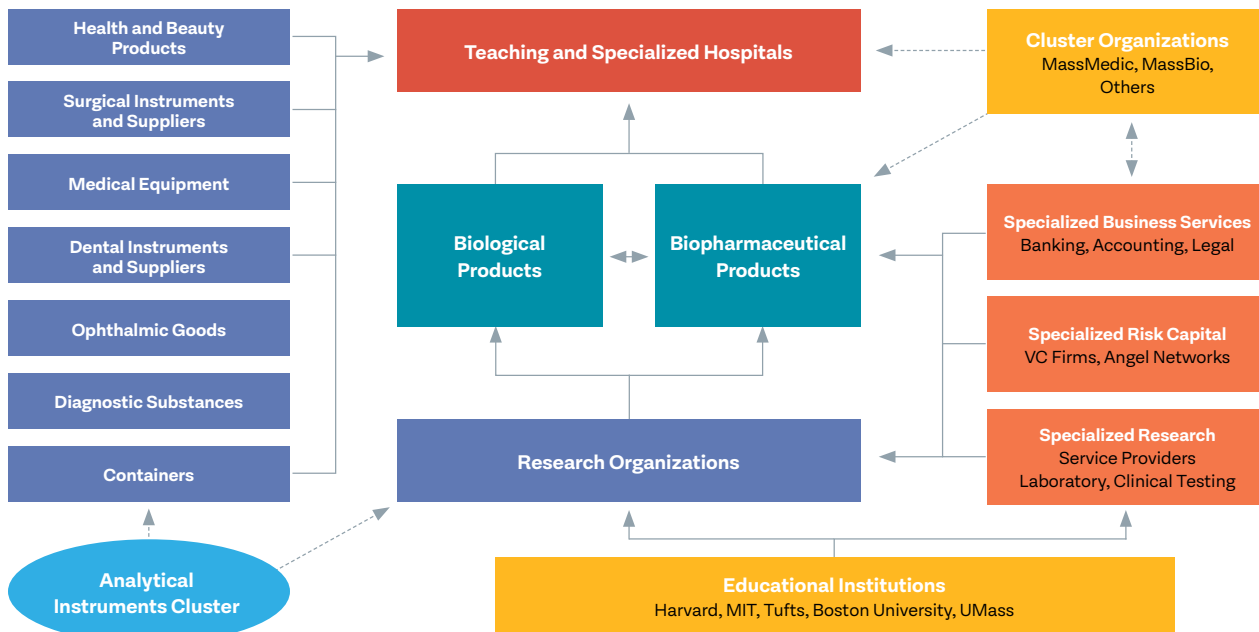
WHAT IS A CLUSTER?

A cluster includes closely related and interconnected industries operating within a specific geography. The companies operating within a cluster are connected by a shared workforce, supply chain, customers or technologies. Every cluster includes core businesses and industries, and the companies that support them, which forms a mutually beneficial business ecosystem. Clusters occur organically and reflect the unique assets and core competencies of a given region that create unique competitive advantages for certain industries.

Figure 1. A Strategic Cluster Framework



Figure 2. Massachusetts Life Sciences Cluster



Source: Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School. Copyright © 2017 Prof. Michael E. Porter.

Models for Driving Cluster Growth

Strategies to support the growth of clusters can be broadly categorized into two models: cluster initiatives and cluster-oriented economic development plans.

Cluster initiatives are narrower in focus, but tend to provide more comprehensive support. They are created to support or accelerate the growth of a specific cluster. Their strategies include developing networks for business financing, suppliers, customers, and workforce development as well as creating opportunities to expand into markets nationally and internationally.

In the U.S., the private sector typically catalyzes cluster initiatives, although the federal government has been playing a greater role in supporting them. For example, the U.S. Small Business Administration (SBA) launched the Regional Innovation Cluster (RIC) Initiative in 2010. SBA currently supports 14 RICs, and, in partnership with other federal agencies, supports 58 cluster initiatives in total.² In 2016, the SBA awarded \$6 million to support the 14 RICs in its portfolio.³ The U.S. Economic Development Administration (EDA)’s Office of Innovation and Entrepreneurship also funds two cluster-focused programs

(the i6 Challenge and the Seed Fund Support Grant Competition) through its Regional Innovation Strategies (RIS) program.⁴ In 2016, EDA awarded \$15 million to 35 organizations across the country through these RIS programs.⁵

As the name suggests, **cluster-oriented economic development plans** integrate cluster strategies into broader economic development plans, which typically target several clusters and include strategies that cut across all clusters (e.g., improved transportation or workforce development). Currently in the U.S., we see more cluster-oriented economic development plans than cluster initiatives, which are more common in Europe and other parts of the world.⁶ Cluster-oriented economic development plans are generally established by public economic development entities or public-private partnerships charged with economic development.

*“While cluster-based economic development is not ‘the’ answer... it is part of a policy agenda that aims directly to strengthen our ability to generate sustainable and meaningful growth.”*⁷ — Christian Ketels, President, TCI

We are not advocating for one model for driving cluster growth over the other. City leaders should choose the model that is the best fit for their economic growth objectives and the capacity of their public and private sectors. Instead, we offer insights from two examples of each type of cluster growth model, representing different geographies and types of clusters, to help city leaders create more effective strategies and maximize their impact.

The San Diego Regional Innovation Cluster (SDRIC) and BioSTL cases offer important strategies for creating successful cluster initiatives. They are spurring growth in the Advanced Defense Technology and Biosciences clusters, respectively. The Chicago Regional Growth Initiative (CRGI) and ProsperityNOLA cases point to important lessons for creating sustainable cluster-oriented economic development plans, whether within a metropolitan region or city.

Table 1. Case Study Summary

Case Study	Context	Cluster Model	Geography	Cluster(s)	Actionable Insights
San Diego Regional Innovation Cluster (SDRIC)	Cities trying to sustain the growth of a mature, large, traditional cluster that already comprises several major corporations or government agencies	Cluster initiative	County (San Diego County)	<ul style="list-style-type: none"> Advanced Defense Technology 	<ul style="list-style-type: none"> One organization cannot drive growth for a large cluster Leverage existing resources Diversify funding streams
BioSTL	Cities trying to support the growth of a traditionally strong cluster that has lost some of its large corporations in a region that also lacks robust economic assets	Cluster initiative	Region (St. Louis MO/IL metro area)	<ul style="list-style-type: none"> Biosciences 	<ul style="list-style-type: none"> Industry should be the driver of cluster building Cluster growth requires a long time horizon Inclusion is a growth strategy
Chicago Regional Growth Initiative (CRGI)	Cities interested in collaborating with regional economic development partners to leverage dispersed economic assets to strengthen regional clusters	Cluster-oriented economic development plan	Region (Northeastern Illinois)	<ul style="list-style-type: none"> Fabricated Metal and Machinery Strategies to support all manufacturing clusters 	<ul style="list-style-type: none"> Identify early wins Aim for co-opetition Leadership needs to involve decision-makers
ProsperityNOLA	Cities interested in creating more economic opportunity for all residents, especially those in poor, inner city neighborhoods, by supporting the growth of traditionally strong and emerging clusters	Cluster-oriented economic development plan	City (New Orleans)	<ul style="list-style-type: none"> BioInnovation and Health Services Creative Digital Media Retail 	<ul style="list-style-type: none"> Developing emerging clusters takes decades Identify inclusive clusters Don't be afraid to reset implementation plans

San Diego Regional Innovation Cluster (SDRIC)

SDRIC offers insights for cities trying to sustain the growth of a mature, large, traditional cluster that already comprises several major corporations or government agencies.

Year established: 2010

Cluster: Advanced Defense Technology

Cluster gap intervention: Provide holistic support (leveraging other service providers) for existing small businesses with mature technology products

Geography: San Diego County, CA

SDRIC emerged out of the Center for Commercialization of Advanced Technology (CCAT) based at San Diego State University. Established in 2001, CCAT was a national technology commercialization initiative focused on identifying and bringing to market innovative national defense technologies, including those developed at the university. Drawing on the deep industry expertise and networks gained from this work, CCAT's leadership team established SDRIC to help bridge a gap that existed in San Diego between small businesses and the broader defense market, including large prime defense contractors.

San Diego is home to the largest concentration of U.S. military assets in the world.⁸ The military and defense sector accounts for more than 22 percent of San Diego's GDP.⁹ There are numerous organizations within San Diego and San Diego County, including the San Diego Regional Economic Development Corporation and the San Diego Association of Governments, that actively support the growth of the very large defense cluster. SDRIC plays a relatively narrow, but important, role in supporting small businesses within C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance), cybersecurity, and autonomous systems.



Naval Station San Diego

(U.S. Navy photo by Journalist 2nd Class Zack Baddorf)

SDRIC is one of the SBA's Regional Innovation Clusters. The organization is housed and run by four staff from the Lavin Entrepreneurship Center in the Fowler College of Business Administration at San Diego State University (SDSU). The cluster initiative is governed by an advisory board including leaders from SDSU, small business and entrepreneurial support organizations, and leading defense companies including Lockheed Martin, Boeing, and Raytheon. No city, county, or state government leaders sit on SDRIC's advisory board, although it does include a representative from the SBA.

Although housed at SDSU, SDRIC is focused on supporting existing small businesses in San Diego, and not those created by university faculty or associated with university research. In other words, it is not a university technology commercialization organization, but rather it leverages the business expertise at the university to support cluster

growth. It provides comprehensive technical assistance and support services to support the growth of San Diego businesses operating in industries related to defense and homeland security. Companies must be a small business located in San Diego County, and generally have a mature business idea (beyond proof of concept stage).

For each company it accepts, SDRIC provides an intake assessment of the company and develops a customized support strategy, which may include business planning and management education, intellectual property and technology commercialization support, and access to mentors, Entrepreneurs in Residence and export assistance.

SDRIC provides the companies it supports with access to free, high-quality consultants as needed and also connects them with student interns from SDSU. For example, when one small business that supplies batteries to large defense contractors and the U.S. Army joined SDRIC, they were provided with a high-quality intellectual property (IP) lawyer that helped the company negotiate IP rights with larger companies. With the assistance of interns from SDSU's business school, another company was able to develop a new website and marketing materials—services its CEO said he would value at \$40,000-\$50,000. As one business owner noted, SDRIC connects companies to “superb quality services for free that would otherwise be unobtainable for small businesses.”

For many SDRIC businesses, the real value for their companies was the connections SDRIC was able to make with the federal government, including the Department of Defense and the Department of Homeland Security, and large prime defense contractors. These connections offer the potential for new contracts for their company. One business owner we interviewed, for example, said that SDRIC alerted him to a solicitation for proposals that resulted in a \$3 million contract for his company with the Department of Defense. SDRIC continues to actively engage with its companies in a long-term partnership—even for years after their initial acceptance.

IMPACT

- SDRIC has been identified by the SBA as one of the most successful RICs it supports.
- 76 percent of small businesses supported by SDRIC stated that the same or similar services were not available elsewhere (the highest percentage across the seven evaluated RICs).
- Small businesses supported by SDRIC grew annually by 8.5 percent (on average) between 2011-2013 in terms of total employment.¹⁰

Actionable Insights

1. One organization cannot drive growth for a large cluster

The defense cluster in San Diego is built on a foundation of strong military assets, large defense corporations and contractors, and innovative technology coming out of universities. Large clusters such as this require many different types of organizations and strong collaboration to support their growth. SDRIC identified and fills a critical need for connections between small businesses and large defense contractors and federal contracting opportunities within the cluster.

2. Leverage, don't duplicate, existing resources

SDRIC is clear in that it doesn't want to replicate services that already exist in San Diego, so much of the work it does is making connections to other resources and support providers like CONNECT, a nonprofit that helps create and scale startups in tech and life science in San Diego, and the San Diego Contract Opportunities Center (a Procurement Technical Assistance Center). SBA's evaluation of SDRIC affirms that the resources SDRIC does provide were not available to small businesses elsewhere.

3. Diversify funding streams

SDRIC receives all of its funding from the SBA's Regional Innovation Cluster program. Although SDRIC has been funded consistently through this program since founding, its award has been reduced significantly and the reliance on a single funder poses a challenge with regards to organizational sustainability.

BioSTL

BioSTL offers insights for cities trying to support the growth of a traditionally strong cluster that has lost some of its large corporations in a region that also lacks robust economic assets.

Year established: 2001

Cluster: Biosciences

Cluster gap intervention: In its first decade it focused on building entrepreneurial innovation assets (e.g., an incubator and research park) and new company creation. It is currently focused on leveraging these assets to help businesses grow and for capital, talent, and corporate attraction.

Geography: St. Louis MO/IL metro area

Leading up to the turn of the century, many of the corporate headquarters that were anchoring the St. Louis economy (such as Southwestern Bell Telephone Company and the aerospace manufacturer and defense contractor McDonnell Douglas) had started to leave the region. Nearly 100 concerned corporate, academic, and civic leaders were convened in 2001 by Dr. William Danforth, Chancellor Emeritus of Washington University in St. Louis, the Danforth Foundation, and the St. Louis Regional Growth Association, to develop a roadmap for activating the city's competitive strengths. They prioritized the plant and life sciences sector because of research strengths at Washington University and Monsanto (a large agricultural corporation headquartered in the city). As a first step, this group established the Coalition for Plant and Life Sciences in 2001 (renamed and formalized as BioSTL in 2011) to formally lead the cluster initiative.

Compared to the defense cluster in San Diego, the bioscience cluster in St. Louis is relatively small and BioSTL has the capacity to drive its growth through a broad coalition of partners. Part of the cluster initiative's success is due to this ability to coordinate all cluster partners through a shared objective.



BioResearch & Development Growth Park and the Plant Growth Facility at the Donald Danforth Plant Science Center (Image courtesy of the Donald Danforth Plant Science Center)

BioSTL is an independent 501(c)(3) run by over ten staff. The organization is led by a Board of Trustees comprised of academic, corporate, and philanthropic leaders. Additionally, BioSTL is advised by the BioSTL Coalition, which is made up of a broad group of 45 public and private cluster stakeholders. BioSTL's major funding sources include Washington University, BJC Healthcare, foundations, corporations, and federal agencies including the SBA and EDA.

Although the St. Louis region had strong universities and corporate assets driving R&D, the Coalition recognized a gap in support and resources that were inhibiting technology commercialization, entrepreneurship, and new company creation. To address this, in its first decade, BioSTL focused on building the region's entrepreneurial assets—the broad resources (e.g., support services, venture capital, and real estate) necessary for driving innovation.

In one of its earliest efforts, the Coalition played a key role in establishing Cortex, a 200-acre technology district, to

address the lack of affordable lab and office space for emerging companies. In 2003, the Coalition established BioGenerator, an incubator-space and investment fund for early-stage bioscience companies. BioGenerator makes direct equity investments in its portfolio of companies, provides access to free state-of-the-art lab space and equipment, and offers advisory and mentoring services.

In its second decade, BioSTL has begun to focus on leveraging the assets it has developed for further growth and capital, talent, and corporate attraction. BioSTL has established platforms to market and brand the innovation strengths of St. Louis; to promote diversity, inclusion, and equity in the region's innovation community; to build a cohesive STEM talent pipeline; and to recruit high-growth international companies to set up their U.S. headquarters in St. Louis through its international attraction initiative, GlobalSTL (established in 2013). While GlobalSTL's initial efforts have focused on recruiting Israeli startups, they have recently expanded to include Ireland, India, France, and Argentina.

BioSTL is also starting to focus more on how it can connect emerging companies with strategic corporate partners. Recently, for example, through GlobalSTL, BioSTL facilitated a partnership between an Israeli startup and a major utility company to pilot a technology that can sense the age and decay of utility poles.

Actionable Insights

1. Industry should be the driver of cluster building

BioSTL credits much of its success in cluster building to the fact that efforts are driven not by economic development organizations but by academic and corporate leaders with deep industry ties and expertise in the biosciences. BioSTL has been successful in engaging corporate leadership in "pre-competitive collaboration," coalescing the private sector around a shared commitment to growing the bioscience cluster and putting St. Louis "on the map," with the understanding that this helps individual corporations to attract talent and innovation.

2. Cluster growth requires a long time horizon

Because BioSTL is sustained by a diverse set of private sector stakeholders, it has been able to take a long-view approach to cluster building. Rather than focusing on

IMPACT

- Cortex has completed or has under construction 1.7 million square feet of new and rehabilitated space, and is home to over 250 companies. It will eventually include 4.5 million square feet of mixed-use space.¹¹
- BioGenerator has invested a cumulative \$13.1 million in its portfolio companies, which has been leveraged 25 to 1.¹²
- BioSTL has successfully recruited five Israeli companies to locate their U.S. headquarters in St. Louis.

quick political wins, BioSTL has been able to take a systems approach, building out a robust infrastructure to drive entrepreneurship and new company creation.

3. Inclusion is a growth strategy

Despite the early success of BioSTL's interventions, those participating in the cluster and utilizing BioSTL's resources were overwhelmingly "pale and male." In 2008, BioSTL's leadership convened a group of CEO-level leaders to discuss how the cluster could be more intentional about diversity. As Ben Johnson, Vice President, Programs at BioSTL noted, "We saw it as imperative for the region's continued, long-term success. If half of the regional population is on the sidelines, unable to access new economic opportunities, ten more years of cluster growth is going to run into a huge challenge." In 2014, BioSTL launched its Bioscience & Entrepreneurial Inclusion Initiative, a stream of programming designed to increase awareness about the ecosystem among professionals underrepresented in the biosciences, and provide them with entrepreneurial training and foster connections to broader networks and resources. BioSTL also hired a new full-time staff to oversee diversity and inclusion efforts. In addition to its programmatic efforts to promote diversity and inclusion, BioSTL organized a regional partnership of entrepreneurial support organizations to secure a Kauffman Foundation Inclusion Challenge award to begin addressing systemic and cultural barriers that limit equity in St. Louis' entrepreneur and innovation community.

Chicago Regional Growth Initiative (CRGI)

CRGI offers insights for cities interested in collaborating with regional economic development partners to leverage dispersed economic assets to strengthen regional clusters.

Year established: 2013

Cluster: Fabricated Metal and Machinery and strategies to support all manufacturing clusters

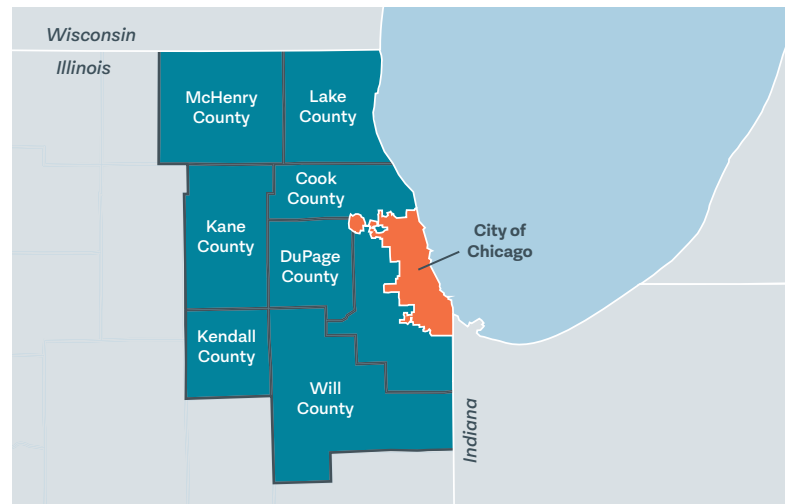
Cluster gap intervention: Accelerate innovation, address workforce and education gaps, and increase exports and investment

Geography: Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will Counties and the City of Chicago, IL

In 2012, Cook County President Toni Preckwinkle commissioned an economic development plan for Cook County, Illinois which is home to the city of Chicago. Though it focused on identifying economic growth opportunities in Cook County, *Partnering for Prosperity: An Economic Growth Action Agenda for Cook County* outlined the critical need for a cluster-based economic development strategy and “strategic, coordinated economic growth initiatives” across the broader Chicago region.¹³ In response, Preckwinkle convened a group of leaders from the Greater Chicago region’s public and private economic development sectors—which included county board chief executives from Cook County, Chicago’s six other surrounding counties (DuPage, Kane, Kendall, Lake, McHenry, and Will)—and the City of Chicago’s Deputy Mayor in 2013 to identify collaborative projects that could drive regional economic growth.

Together, they established the Chicago Regional Growth Initiative (CRGI), an informal organization for collaboration led by a steering committee made up of these leaders and each of their various economic development organizations. Recently, the group agreed to establish a 501(c)(3) with a small staff and board of directors. CRGI leadership has appointed a Managing Director and is exploring funding opportunities. All of the counties and

Figure 3. CRGI Focus Area



the City of Chicago have pledged a financial commitment for the first three years, but CRGI is also seeking philanthropic support for its initial pilot phase of operation. Leadership acknowledges that developing a sustainable financial model remains a challenge.

To date, CRGI has prioritized the clusters identified in *Partnering for Prosperity* that have the greatest economic growth opportunities (Fabricated Metals, Food Processing and Packaging, Transportation and Logistics, and Health), along with other regional economic development objectives.

CRGI’s first initiative was the creation of the Chicago Metro Metal Consortium (CMMC), which was launched in June 2014 with its designation as one of the original twelve Investing in Manufacturing Communities Partnership (IMCP) communities.¹⁴ Within Chicago and the seven counties participating in CRGI, there are over 4,000 fabricated metal and machinery firms generating more than \$25 billion annually in revenue and employing more than 110,000 individuals.¹⁵ CMMC offers manufacturers resources to grow their business through networking and collaboration, supports the growth of a skilled manufacturing workforce, and promotes the region as a leading center for manufacturing.

A second initiative, Metro Chicago Exports, was established in 2014 to increase exports from small and medium-sized companies. Metro Chicago Exports has developed a step-by-step export roadmap, provides businesses with grants to reduce barriers to entering new markets, sponsors annual pitch competitions, and has developed a database of organizations that can support companies looking to export. Metro Chicago Exports partners with ExporTech, a national export assistance program, to assist companies in developing comprehensive export plans.

In 2016, CRGI was also selected to develop a regional foreign direct investment (FDI) strategy as a part of the Global Cities Initiative, a joint project of the Brookings Institution and JPMorgan Chase. FDI represents an increasing amount of private-sector employment in the Chicago region, and supporting the retention, expansion and attraction of these investments is critical for job creation. The FDI plan complements the work of Metro Chicago Exports, and together they form a comprehensive trade and investment strategy for the region.

As a potential future project, CRGI leadership also identified streamlining the complexity of the Northeastern Illinois truck permitting landscape as a key opportunity for collaboration that would strengthen the transportation and logistics sector in the region. The Chicago region is the freight and logistics hub of the nation, with nearly \$800 billion in goods moving in and out annually.¹⁶ Yet, oversized or overweight trucks passing through often are required to obtain three or more permits for a single trip, increasing operational costs for businesses along the supply chain, which may discourage investment in related industries in the region.

CRGI leadership has also adopted inclusive economic growth as a guiding principle for formal collaboration moving forward.

Actionable Insights

1. Identify early wins

When developing a regional strategy among entities that may traditionally compete with each other for investment, it is critical to find some early wins that highlight tangible returns. Early work with CMMC, Metro Chicago Exports and truck permitting involved little competition

IMPACT

- CMMC has leveraged over \$46 million in public and private resources directly impacting manufacturers in Illinois, with a focus on the fabricated metal and machinery sectors.¹⁷
- Metro Chicago Exports has awarded \$454,429 in grant assistance and funded export activities for 84 regional businesses.¹⁸
- A study of regional truck permitting initiated by CRGI was completed in November 2016 by the Chicago Metropolitan Agency for Planning. It presented current challenges and nine recommendations for streamlining a complex and fragmented oversized or overweight truck permitting system.

between counties for investment. As Cook County President Preckwinkle noted, “We tried to do things at first to get easy victories—to pick the low-hanging fruit. We focused on things that everyone felt was a win, and left the contentious things for later.”

2. Build trust and aim for co-opetition

A representative of Will County noted the element of “co-opetition” involved in CRGI: “We are cooperating at the front end to generate jobs, wealth, and taxes. But all deals happen at the local level, so we ultimately compete against each other, but that’s okay. It is more efficient to do the cooperative stuff together.” Counties may be competing increasingly, for example, on FDI, although stakeholders acknowledge there are places to work together, like developing a regional branding strategy.

3. Leadership needs to involve decision makers

A key to success for CRGI has been the direct involvement of executive leaders, those with decision-making authority, from each of the bodies involved in CRGI’s governance. Although successful at establishing lines of communication, a previous attempt at regional collaboration—the Metro Economic Growth Alliance of Chicago—largely failed because it was comprised of only economic development practitioners who lacked the authority to establish new strategies.

ProsperityNOLA

ProsperityNOLA offers insights for cities interested in creating more economic opportunity for all residents, especially those in poor, inner city neighborhoods, by supporting the growth of traditionally strong and emerging clusters.

Year established: 2013

Clusters: BioInnovation and Health Services, Creative Digital Media, and Retail

Cluster gap intervention: Varies based on cluster

Geography: New Orleans, LA

In 2012, with New Orleans still suffering from the devastating effects of Hurricane Katrina, the city began the process of developing a five-year, comprehensive economic development plan, *ProsperityNOLA*, to strengthen and diversify the economy post-Katrina in order to create economic opportunity for all New Orleans residents.¹⁹ The New Orleans Business Alliance (NOLABA), founded in 2010 as the official economic development agency for the City of New Orleans, led the planning process. NOLABA convened over 200 stakeholders from business, government, higher education, nonprofits, philanthropy and economic development communities as part of the process.

As part of the process, ICIC conducted a cluster analysis that became the basis for the plan. Ultimately, five priority clusters that would generate the most quality jobs and have the greatest potential to impact the city's competitiveness were chosen: Advanced Manufacturing; Transportation, Trade and Logistics; BioInnovation and Health Services; Creative Digital Media; and Sustainable Industries. The plan also includes strategic priorities that support the growth of all clusters, such as rebranding and marketing New Orleans and connecting the city to global markets.

NOLABA is also responsible for leading the implementation of *ProsperityNOLA*, and the plan guides the organization's activities. An independent 501(c)(3), NOLABA operates as a public-private partnership and is led by an 17-member board, composed of a cross section of



University Medical Center, New Orleans BioDistrict
(Image courtesy of NBBJ)

public- and private-sector leaders. NOLABA receives most of its funding (approximately 62 percent) from the City of New Orleans.²⁰ It also receives some federal, philanthropic, and corporate funding, but acknowledges that its overreliance on funding tied to a particular administration poses a challenge for organizational sustainability.

To guide implementation, NOLABA established an action plan for each of the five clusters. Within each of the five clusters, a comprehensive workstream outlined key cluster interventions, which varied based on the needs of the cluster. This ranged from improving workforce pipelines, to increasing public procurement, to increasing capital access, or establishing an incubator to support entrepreneurship.

The implementation of this ambitious plan, in a city with limited resources, has been challenging. NOLABA's change in leadership—its founding President and CEO left in 2015—posed another major challenge. However, because of the strong initial buy-in created during the planning process, the *ProsperityNOLA* plan continues to guide the strategy and collaboration of many organizations helping to build the targeted clusters. As one stakeholder noted, “There isn't a single organization driving

cluster conversations and action now, but people are thinking in terms of clusters, networks and partnerships. A lot of progress has been made, but not all centralized under the leadership of NOLABA.”

NOLABA has narrowed its focus to three clusters: Creative Digital Media, BioInnovation and Health Services, and Retail, which was not included in *ProsperityNOLA*. NOLABA has signed an agreement with Greater New Orleans, Inc. (the regional economic development agency), to lead the strategies in the remaining clusters: Sustainable Industries, Transportation, Trade and Logistics, and Advanced Manufacturing.

In the three clusters it leads, NOLABA focuses on traditional business attraction and retention, employing dedicated business development professionals focused on growing these clusters. For example, to support Creative Digital Media, NOLABA markets relevant tax incentives to attract businesses to locate in New Orleans. In 2015, NOLABA partnered with other local stakeholders to launch IdeaTour, an annual two-day program designed to recruit national entrepreneurs to move their companies to the region.

NOLABA also has taken over administration of BioDistrict New Orleans, an economic development district created by the State of Louisiana in 2005, and is working to attract large companies in the BioInnovation and Health Services cluster to locate there. The BioDistrict is anchored by the University Medical Center Hospital and Southeast Louisiana Veterans Health Care System Medical Center and is home to the New Orleans BioInnovation Center, a life science business incubator.

NOLABA added Retail to the clusters it supports since after Katrina many large retailers never reopened or left the city. NOLABA works to attract large national retailers and developers to the city.

Actionable Insights

1. Developing emerging clusters takes decades

Developing emerging clusters within *ProsperityNOLA*'s five-year timeline was unrealistic. Emerging clusters can take decades to evolve. As a representative from NOLABA noted, “You have to divide projects into small wins, but also be realistic in terms of how long it takes. We underestimated what it takes to implement this plan.”

IMPACT

- **Creative Digital Media:** In 2015, three creative digital media startups representing a \$5 million initial investment relocated to New Orleans. And Collision Conference, America's fastest growing tech conference, relocated to New Orleans from Las Vegas for 2016-2018.
- **BioInnovation and Health Services:** In 2014, NOLABA led efforts to attract the development of Cobalt Rehabilitation Hospital of New Orleans, a new 60,000 square-foot hospital that opened at the edge of the BioDistrict in 2016. NOLABA also launched NOLABIO, a dedicated website that promotes assets and opportunities in this cluster.
- **Retail:** Between 2011 and 2016, New Orleans has seen a 39 percent increase in retail sales.²¹

2. Identifying inclusive clusters is critical in cities with large inner cities

New research shows that clusters that are strong in the region, city and inner city maximize inner city employment gains.²² Supporting the growth of these “inclusive clusters” is critical to ensure that cluster-oriented economic development plans are equitable for all city residents. This premise was at the core of the *ProsperityNOLA* planning process and was intended to create new economic opportunities for all residents.

3. Don't be afraid to reset implementation plans

Cities invest an abundance of time, energy, and resources into developing cluster-oriented economic development plans, which can make it challenging to conclude that a plan may no longer be working effectively as a guiding strategy. Plans are meant to be living bodies of work, and cities shouldn't be afraid to reset the planning process, reassign roles, and establish new timelines. NOLABA is already starting conversations about what *ProsperityNOLA* 2.0 looks like given that the 2018 end date is rapidly approaching. The organization also wasn't afraid to modify the plan as needed to overcome implementation challenges.

Recommendations for Designing High-Impact Cluster Growth Strategies

Each of the case studies highlighted in this report offers actionable insights to help city leaders galvanize their cluster building efforts. They represent unique insights for the two types of cluster growth models that exist in the U.S.—cluster initiatives and cluster-oriented economic

development plans—in different contexts. For city leaders designing new cluster growth strategies, we also offer a set of six general recommendations to ensure the strategies will maximize economic growth.

Six Strategies for Driving High-Impact Cluster Growth



Choose the right cluster(s)



Identify appropriate cluster interventions



Be flexible about geography



Leadership needs to have relevant industry expertise



Establish strong public-private partnerships



Identify a sustainable business model

1 Choose the right cluster(s)

The success of any cluster strategy depends first and foremost on whether the cluster actually represents a city's competitive advantages. For example, with the explosion of high-tech sectors, city leaders may be tempted to replicate the success of other cities and try to become the next Silicon Valley or Boston. Unless their cities share the same assets as those they are trying to replicate, however, the cluster strategy will not have the same impact.

“Cluster strategies are likely to fail when they are not aligned with competitive assets.”

Every city needs to start by conducting a comprehensive analysis of the region's strong and emerging clusters. Publicly available cluster data, such as the U.S. Cluster Mapping website, makes this task more feasible.²³ The prioritization process to identify targeted clusters needs to be data-driven, but should also include input from relevant stakeholders. In addition, to ensure inclusive economic growth that creates equitable economic opportunities for all residents, cities need to identify inclusive clusters, those clusters that are strong in the region, city and inner city and that offer job opportunities for all residents.

2 Identify appropriate cluster interventions

Too frequently, cluster strategies include interventions popular in other cities (e.g., incubators and accelerators), but which may not be critical for all clusters. The industry and firm composition of clusters can vary depending on the cluster and the region. The Financial Services cluster in New York City, for example, may not have the same characteristics as the cluster has in Dallas, and it does not have the same composition as other clusters in New York City. Effective cluster interventions need to be developed in response to gaps within clusters, which can be identified through a comprehensive cluster diagnostic.

“A formulaic approach to cluster growth will be less effective than strategies tailored to the unique circumstances of a cluster based on an in-depth analysis of its strengths and weaknesses.”

ANALYZING CLUSTER GAPS

A cluster diagnostic that analyzes the following components will help guide the development of more effective cluster growth strategies:

- Industry composition within the cluster
- Firm composition (size and age) within the cluster
- Workforce requirements within the cluster
- Existing workforce within the city
- Sources and incentives for innovation within the cluster and the city
- Sources of capital within the city
- Land use patterns in the city
- Local, state and federal policies and regulations that impact the cluster

3 Be flexible about geography

Cluster boundaries rarely conform to political boundaries. Clusters that create jobs within a city may include businesses located outside of city boundaries. In addition, clusters exist not only within a city, but at the regional level. This implies that effective cluster strategies should not constrain their focus to specific city boundaries or sub-city boundaries. As one expert we interviewed stated, “You can’t draw a line around a part of a city and create cluster development in that area. It just won’t work.” Regional collaboration for all cluster strategies is also critical to maximize economic growth within a city.

4 Leadership needs to have relevant industry expertise

The organizations that manage cluster initiatives and cluster-oriented economic development plans are diverse. They include public or public-private economic development organizations, independent nonprofits, and university-based centers. However, to gain the respect of corporate leaders, which is essential for cluster growth, the leadership of these organizations needs to have deep industry expertise. This expertise is also essential for identifying and developing the right type of interventions to support cluster development.

“The credibility of economic development professionals is a real issue for industry leaders. People running programs need to have specific industry expertise.”



5 Establish strong public-private partnerships

Cluster initiatives and strategies can create a mechanism, which often does not already exist, for constructive cross-sector collaboration. Representatives from the business community may be difficult to engage because of concerns over competition. They often need to be convinced that cluster growth will expand economic opportunities for all the businesses within the cluster. Cluster strategies that connect their broad objectives to company objectives such as R&D, workforce or supply chains are able to sustain the support of corporations. The success of the cluster strategies depends on the willingness of the stakeholders within the cluster, including those in competitive industries, to work together. Building coalitions is essential, especially within highly rivalrous industries and with mature firms.

6 Identify a sustainable business model

One of the biggest challenges facing cluster growth organizations, especially those created with federal grants, is establishing a sustainable business model. Public sector funding is often used to support the first years of operation, but ultimately that support needs to be replaced. This funding also may be less reliable than planned, as the recently proposed federal budget cuts for SBA's RIC Initiative have highlighted. Sustainable business models include diverse funding streams from public and private sectors, fee-for-service models and equity stakes in new ventures.

“The success of the cluster strategies depends on the willingness of the stakeholders within the cluster, including those in competitive industries, to work together.”

Endnotes

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Six Strategies for Driving High-Impact Cluster Growth

1



Choose the right cluster(s)

4



Leadership needs to have relevant industry expertise

2



Identify appropriate cluster interventions

5



Establish strong public-private partnerships

3



Be flexible about geography

6



Identify a sustainable business model

ABOUT THE INITIATIVE FOR A COMPETITIVE INNER CITY:

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