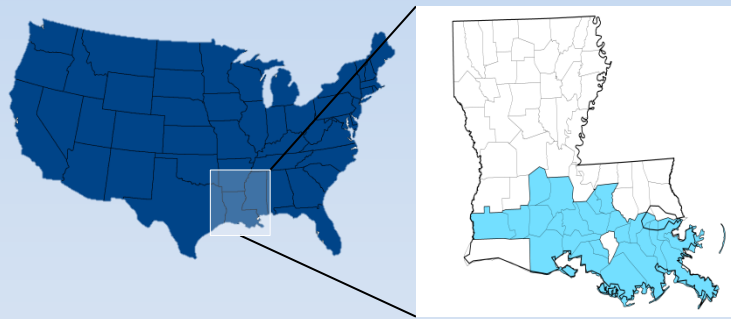


# Investing in Manufacturing Communities Partnership

## South Louisiana Chemical Manufacturing Community/ Louisiana Chemical Corridor



### The Community

South Louisiana is internationally known for its chemical manufacturing and abundant supply of natural gas and petroleum. The “chemical corridor,” spanning 200 miles from New Orleans to Baton Rouge and Lake Charles, is the home of hundreds of chemical manufacturing facilities and refineries worth billions of dollars. The high international demand for petrochemical and energy-related products has created a network of key technology and supply chains (KTS) deployed for building, operating and servicing these facilities. Advanced industries including manufacturing, energy and services sectors together employed 255,920 fulltime workers (direct plus indirect jobs), produced \$60.6 billion in output and accounted for 27.3% of all output in the region in 2013. While demand continues to grow, this industry is experiencing a shift toward more sustainable resources and practices worldwide.

### The Vision

The goal of the South Louisiana Chemical Manufacturing Community, led by Louisiana State University, is to develop a vibrant nationally and internationally known chemical manufacturing community that increases positive social and environmental impacts, including job growth, waste reduction and product innovation. This healthy, regional chemical manufacturing sector will provide the rest of the country with a stable supply of innovative chemical products that feed the downstream manufacturing of consumer goods for the U.S. and international markets. The partnership includes experts in sustainability, workforce development and small business development, in order to truly build an integrated approach.

### The Strategy

**Workforce and Training:** In four to five years it is estimated that this region will experience a large shortage of skilled workers needed to build, operate and service chemical facilities, so a primary focus of the consortium will be to address this workforce gap. The workforce plan focuses on equity and aims to provide training to lower-skilled and lower-income workers through projects like the Incumbent Worker Training Program. Plans are to strategically align new investments in higher education with workforce needs and emerging growth sectors in the state economy. The Louisiana Department of Education is working with high schools in the planned community to implement programs to provide high school credit for training relevant to high-need areas in chemical manufacturing. Expanding the capacity of existing training facilities

will significantly benefit the chemical manufacturing community. These improvements are expected to result in the creation of new jobs, the retention of jobs that otherwise may have been eliminated, and an increase in wages for trained workers.

**Supplier Networks:** One of the region's greatest assets is the relationships built between and within industries that foster collaboration and innovation. Building a stronger network within the chemical manufacturing industry will support greater efficiency, promote the use of best practices and new technologies, and reduce waste. The supplier network plan takes an industrial ecology approach that studies inputs, outputs and waste products of industries and their relationships to the local economy and the environment. The assessment will reveal potential synergies across industries, such as using the waste products of the seafood industry (shells of crustaceans) to treat river water used by the chemical industry. The New Orleans East EcoPark is being developed to support existing and emerging industries in southeast Louisiana, including sustainable energy, emerging technologies and facilities to support the expansion of the Port of New Orleans and the container-on-barge market.

**Research and Innovation:** The LCC consortium recognizes that by developing new research partnerships and fostering innovation, Louisiana can remain a cutting-edge energy and chemical manufacturing sector. The region is home to several research universities including LSU, Southern University, University of Louisiana Lafayette, University of New Orleans and LCTCS. These institutions have developed their research, development and training capabilities in many technical areas important to the regional chemical industry, and will continue into the future. The planned chemical manufacturing community will leverage existing priority research and innovation programs and take a multi-disciplinary approach to building cooperative research partnerships with regional chemical manufacturers and service providers for innovative solutions to actual problems in chemical manufacturing in the region. They also want to seize the enormous opportunity for Louisiana to be a leader in sustainable chemical manufacturing.

**Infrastructure and Site Development:** By developing more efficient transportation infrastructure, improving water infrastructure, restoring the coastal infrastructure and developing brownfield sites, the consortium wants to not only enhance economic opportunities for the chemical manufacturing sector, but also build stronger, more resilient communities. To reduce future infrastructure failures due to events resulting from climate change, the operation of the current drainage system needs to be optimized. The Urban Water Plan drafted by Waggoner Ball & Associates will integrate the water system into the urban landscape, neighborhoods, individual properties and the everyday lives of residents. The plan will result in a predicted 3 billion dollars of economic development, including more attractive sites for manufacturing and expansion. Transportation planning and local economic development initiatives support the growth of the manufacturing sector. RPC's Brownfield Redevelopment Program, supported through grants from the EPA, will facilitate the redevelopment of Brownfield sites into manufacturing hubs.

**Trade and Investment:** The Louisiana International Commerce Master Plan and its 22 specific initiatives set a clear road map for the state to outperform the competition for international investment. Going forward, the partnership between the Louisiana Board of International Commerce (LaBIC) and the Secretary of Louisiana Economic Development

(LED) will result in innovative responses to the needs of the private sector and continuous improvements to Louisiana's competitive position in the global marketplace. More specifically, this partnership envisions LED's business development team engaging with companies across key international markets to ascertain their investment requirements for new projects. LaBIC will then be able to leverage this field intelligence to recommend specific infrastructure and non-infrastructure projects to the state legislature. This clear line of communication between prospective investors and the state legislature through LaBIC is a tremendous new asset that will ensure Louisiana receives a disproportionate share of foreign direct investment.

**Operational Improvement and Capital Access:** Chemicals are the backbone of U.S. manufacturing, but their production is energy intensive. The chemical manufacturing community in south Louisiana faces several challenges to sustain its healthy growth in a competitive environment. Among other programs, they plan to launch the innovative federal E3 program that integrates business leadership, environmental and energy management, and community development goals into a one-stop-shop technical assistance program. The community also seeks to align diverse and innovative methods of capital access with potential needs. This will enable quick connections between opportunities for growth and the right funding sources, not only benefiting the chemical industrial ecosystem, but other industries as well. The Value Louisiana Initiative (VLI) is exploring innovative financing mechanisms that could be brought online and coordinated to ensure sustained support for coordination and technical assistance infrastructure to work with the manufacturing sector, and to develop a robust portfolio of capital access options for small, medium and large manufacturers to finance improvements, innovation and growth.

### **The Partnership**

Louisiana State University is the lead organization for this partnership, which has extensive manufacturing community support and will include a wide array of partners:

**Private Sector Partners:** Performance Contractors, Green Coast Enterprises; **Non-Profit:** Louisiana Chemical Association, Louisiana Small Business Development Center, Foundation for Louisiana; **Government Entities:** Louisiana Economic Development, Louisiana Workforce Commission; **Other:** LifeCity, LLC., Manufacturing Extension Partnership of Louisiana; **Higher Education Institution:** Louisiana State University, Louisiana Community & Technical College System.