

## Global Charlotte Manufacturing Ecosystem

The Global Charlotte Manufacturing Community's key competitive competency exists as the manufacturing Super-Cluster of firms that develop and or apply new technologies, processes and solutions, increasingly classified as "Advanced Industries". As stated in the Region's 2012-2017 Comprehensive Economic Development Strategy ("CEDS"), our core competencies in Advanced Manufacturing, Engineering, and Information Technology are embedded in five of our six Targeted Industry Clusters (Aerospace, Automotive, Biopharmaceuticals, Logistics, and Energy). Together, these competencies and Targeted Industry Clusters form the Charlotte Manufacturing Super-Cluster promoted through the Global Vision Leaders' Group regional slogan, "Create It, Make It, Move It."<sup>1</sup> The Region harnesses its Engineering & IT competencies to design innovative technologies, its Advanced Industries Manufacturing competencies to competitively produce a very wide range of goods, and its Logistics cluster to provide competitive advantage in delivering product worldwide.



Source: 2012 Centralina CEDS, "Prosperity for Greater Charlotte"; Charlotte USA 2013-2014 Annual Economic Development issue

What is Advanced Manufacturing? According to the President's Council of Advisors on Science and Technology's Report to the President on Ensuring American Leadership in Advanced Manufacturing:

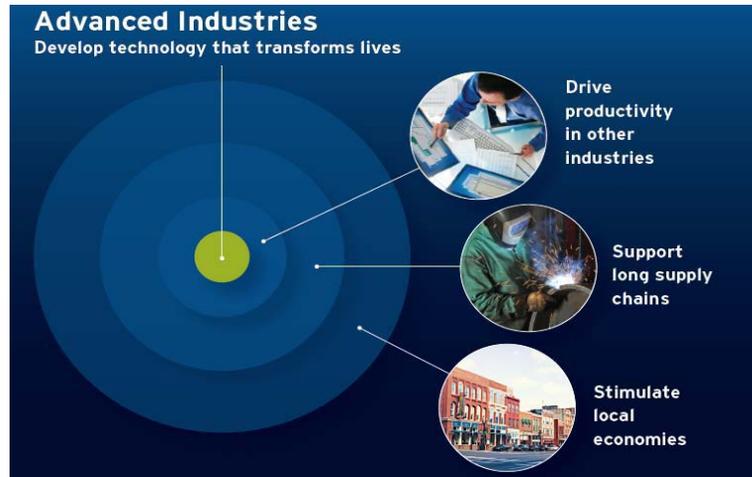
Advanced Manufacturing is "a family of activities that (a) depend on the use and coordination of information, automation, computation, software, sensing, and networking, and/or (b) make use of cutting edge materials and emerging capabilities enabled by the physical and biological sciences."

<sup>1</sup> Global Vision Leaders are 50 business and civic leaders promoting a Global Vision for the Region and hosting the Charlotte Global Competitiveness Summit events.

In addition, according to the Report to the President on Capturing Domestic Competitive Advantage in Advanced Manufacturing, also by the President's Council of Advisors on Science and Technology:

Advanced Manufacturing is not limited to emerging technologies; rather, it is composed of efficient, productive, highly integrated, tightly controlled processes across a spectrum of globally competitive U.S. manufacturers and suppliers. As such, this then involves both new ways to manufacture existing products or the manufacture of new products with new advanced technologies. For advanced manufacturing to accelerate and thrive in the United States, it will require the active participation of communities, educators, workers, and businesses, as well as Federal, State, and local governments.

What, exactly, are Advanced Industries (AIs)? AIs are crucial drivers of U.S. global competitiveness—and therefore prosperity. Altogether, Brookings and McKinsey identify 23 AIs that are distinguished by above-average investment in research and development (R&D) and heavy employment of skilled STEM workers. These industries comprise the nation's industrial innovation sector. These industries transform lives and the economy through the introduction and diffusion of new technologies, processes, and solutions.



Source: Brookings - Feb 2014