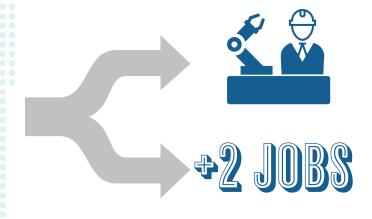
## MANUFACTURING MATTERS

For every manufacturing job created in the state...







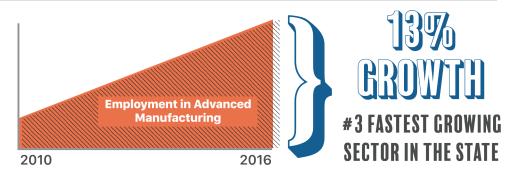
...two additional jobs are created.

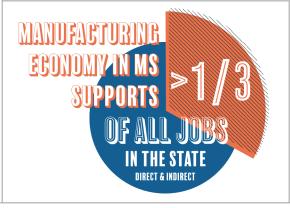
## MANUFACTURING JOBS PAY













NG SECT



## JAY C. MOON PRESIDENT AND CEO, MISSISSIPPI MANUFACTURERS ASSOCIATION

"Manufacturing has always been an important part of our nation's economy. Similarly, in Mississippi, manufacturing continues to be a significant source of jobs for our citizens and one of the largest contributors to our state's economic profile. For example, for every direct job in manufacturing, another two jobs are created in the economy to support that job. The manufacturing industry is the backbone of Mississippi's economy. Manufacturing jobs pay higher wages and provide better benefits on average to employees and their families. Please take a moment to review the infographic images in this handout that showcase how significant manufacturing is to Mississippi."

## **DEFINITIONS AND DATA SOURCES**

Industry Multiplier: This indicator gauges the extent to which the creation of a job within an industry contributes to the creation of one or more jobs in other sectors within the larger economy. For example, a multiplier of 3.0 means that, for every direct job created, two more indirect jobs are created in other sectors within the larger economy. We used the Regional Economic Modelling Inc. (REMI) PI+ model to estimate the manufacturing multiplier for the state of Mississippi. This is the official model adopted by the Mississippi Institutions of Higher Learning to assess the economic environment in the state. To account for variation across manufacturing subsectors, we estimated subsector specific multipliers. The estimates show that, within manufacturing, the multiplier ranges 1.5 for printing and related product manufacturing to 11.5 for petroleum and coal product manufacturing, for an average of approximately 3.0 for the overall manufacturing industry.

**Gross Domestic Product (GDP):** This indicator measured the annual total dollar value of goods produced and services provided. GDP was measured using 2015 data from the Bureau of Economic Analysis. The Mississippi GDP in 2015 was \$105.8 billion. Manufacturing was the number one private sector contributor, generating \$16.3 billion, or 15.4 percent of the total Mississippi GDP.

**Total Employment:** This indicator measured the annual average number of workers in a given industry. Employment was measured using 2016 data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW). Manufacturing accounts approximately 13 percent of the total covered employment in the state. The manufacturing sector as a whole directly supports over 143 thousand jobs and indirectly supports over 285 thousand jobs in the state, contributing to over one third of all jobs.

**Employment Growth:** This indicator measured the growth rate between two points in time. Specifically, for the purpose of this report, growth was measured between 2010 and 2016. Employment in advanced manufacturing has grown by over 13 percent since 2010, compared to approximately four percent for the state as a whole. When compared to other sectors, advanced manufacturing is the 3rd fastest growing sector in Mississippi.

**Earnings:** This indicator measured the annual average wage per employee in a given industry. Annual average wage was measured using 2016 data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW). Manufacturing jobs in Mississippi paid an annual average wage of \$46,192, compared to \$36,356 for other sectors. Advanced manufacturing is the 4th highest paying sector in the state, with an annual average wage of \$56,902.

This report was prepared by the National Strategic Planning and Analysis Research Center (NSPARC), a unit of Mississippi State University. For information about this report contact: