

THE VALUE OF INNOVATION IN MASSACHUSETTS

► Manufacturers' Economic Impact and the Value of Innovation



Our nation's manufacturers are driving an innovation revolution, creating economic growth and jobs.

- Total output from manufacturing in Massachusetts was \$45.06 billion in 2014.
- In addition, there were 249,800 manufacturing employees in Massachusetts in 2015, with an average annual compensation of \$96,394 in 2014.

Manufacturers in the United States perform more than three-quarters of all private-sector research and development (R&D) in the nation, driving more innovation than any other sector.

- In Massachusetts alone, the manufacturing industry spent \$17.5 billion on R&D in 2012—ranking it second nationally.
- For the U.S. as a whole, the industry spent \$292.7 billion in 2012, suggesting that Massachusetts accounted for 6% of industry R&D in the country.¹

This investment creates valuable Intellectual Property (IP), the lifeblood of manufacturing.

- Manufacturers of all sizes depend on patents to spur investment and foster innovation. There were 7,079 patents issued in Massachusetts in 2014.
- Of those patents, 6,725 were utility patents or “patents for invention”—issued for the invention of a new and useful process, machine, manufacture, or composition of matter, or a new and useful improvement thereof.²

In a recent survey conducted by the NAM, respondents were asked about measures in state legislatures across the country aimed at requiring certain manufacturers to turn over IP including highly sensitive operation information, such as production, marketing and research costs that support new innovative development.

- **These targeted measures threaten manufacturing competitiveness for all.** More than 83 percent of respondents would consider these actions a threat to their competitiveness.
- **These measures, if enacted, threaten investment.** More importantly, 46.7 percent felt that such measures would force them to curtail investments in R&D of now-proprietary technologies and products.

To secure manufacturing competitiveness, it is crucial to create a policy environment in the U.S. designed to attract and retain investment and encourage innovation with strong protections of intellectual property.

¹ <http://www.nsf.gov/statistics/states/interactive/show.cfm?stateID=53,22&year=0>

² http://www.uspto.gov/web/offices/ac/ido/oeip/taf/st_co_14.htm