What GAO Did This Study
The U.S. manufacturing sector—representing about 12 percent of the economy and employing 12 million workers in 2015—has undergone changes over the last several decades. With increased productivity and technological innovation, the sector experienced a decreasing number of jobs and share of the economy. GAO was asked to examine how the federal government supports manufacturing.

This report examines (1) how selected federal programs and tax expenditures provide support to U.S. manufacturing; (2) how programs are addressing manufacturing trends; and (3) the extent to which agencies measure performance and assess effectiveness in support of manufacturing generally, and advanced manufacturing specifically. GAO reviewed selected programs with a focus on manufacturing, among other criteria, and conducted a survey of these selected programs to collect data on their budget, activities, and effects. GAO also reviewed reports and interviewed agency officials and experts.

What GAO Found
GAO identified 58 programs in 11 federal agencies that reported providing support to U.S. manufacturing by fostering innovation through research and development, assisting with trade in the global marketplace, helping job seekers enhance skills and obtain employment, and providing general financing or business assistance. Twenty-one of these programs reported using all of their obligations in fiscal year 2015 to support U.S. manufacturing. For these 21 programs, obligations of each program ranged from $750,000 to $204 million in fiscal year 2015, the most recent full year of data. Twenty-six other programs reported using funding to support manufacturing—in addition to other sectors—and provided ranges of estimates for the obligations directly supporting manufacturing. The remaining 11 programs either did not provide an estimate of their support to manufacturing or reported no program obligations in fiscal year 2015. GAO also identified nine tax expenditures that can provide benefits to manufacturers, amounting to billions of dollars in incentives for both the manufacturing sector and other sectors of the economy.

Most (51) of the 58 programs reported addressing trends toward an increase in advanced manufacturing (e.g. activities using automation, software, or cutting edge materials), the need for a higher-skilled workforce, and more global trade competition for U.S. manufacturers by providing funds and resources, sharing information, and promoting coordination. Survey responses from the 58 programs indicated that more than two-thirds of them are addressing the shift toward advanced manufacturing, approximately half are taking steps to address increased globalization and competition, and fewer than half are addressing the need for a higher skilled workforce.

Forty-four of the 58 programs reported having performance goals or measures related to the support of manufacturing, but agencies that comprise an interagency group have not identified the information they will collect from agencies and use to report progress in supporting advanced manufacturing. Ten of the 11 agencies that administer programs GAO reviewed participate in a federal interagency initiative to coordinate activities and report on progress in the area of advanced manufacturing. The Subcommittee on Advanced Manufacturing—co-chaired by the Office of Science and Technology Policy (OSTP) and that coordinates advanced manufacturing efforts—supports the updating and reporting on a National Strategic Plan for Advanced Manufacturing. The plan, which was published in 2012, identifies objectives and potential measures that could be used to assess progress. The subcommittee plans to report in 2018 on progress in achieving the strategic plan’s objectives, as required by the Revitalize American Manufacturing and Innovation Act of 2014. However, OSTP has not worked with the subcommittee member agencies to identify the information needed to report progress in achieving the strategic objectives, such as what measures will be used. While subcommittee officials said the subcommittee does not provide top-down direction to federal agencies on how to measure effectiveness, specifying the information it will collect from federal agencies would better position it to report consistent and comprehensive information on the progress in achieving the plan’s objectives.