ORIVING THE FUTURE



THE EMPLOYMENT AND ECONOMIC IMPACT OF THE VEHICLE SUPPLIER INDUSTRY IN THE U.S.



THE LARGEST SECTOR OF MANUFACTURING JOBS IN THE UNITED STATES JUST GOT BIGGER

The Motor & Equipment Manufacturers Association (MEMA) and its four specialized divisions comprise the leading international trade association in the fast-changing Mobility Industry.

Representing vehicle suppliers that manufacture and remanufacture components, technologies, and systems for use in passenger cars and heavy trucks, MEMA's members drive innovation in the Mobility Industry by combining high-tech capabilities in new vehicles –such as autonomous vehicles and vehicle connectivity—and the "nuts and bolts" of vehicle manufacturing.

871,000 AMERICANS EMPLOYED IN 2015



734,000 AMERICANS EMPLOYED IN 2012

OF JOBS

VEHICLE PARTS MANUFACTURING

REPRESENTS IN THE TOTAL

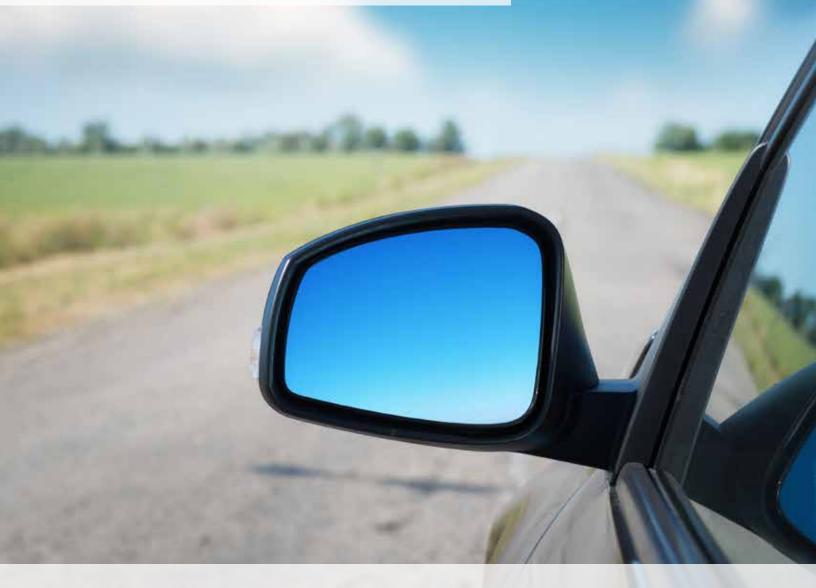
U.S. EMPLOYMENT MARKET

[UP 0.2 SHARE POINTS FROM 2012]

MOTOR VEHICLE PARTS MANUFACTURING JOBS GREW NEARLY

19% SINCE 2012

The Mobility Industry is on the cusp of the biggest change in more than 100 years, and MEMA's members are poised to meet the demands of vehicle-to-vehicle communications, vehicle-to-infrastructure capabilities, and the Internet of Things. MEMA's members are at the forefront of this incredible growth in jobs, fuel economy, and - perhaps most importantly - safety.



MOTOR VEHICLE PARTS SUPPLIERS, INCLUDING HIGH TECH COMPONENTS, CONTRIBUTE MORE THAN

OF THE VALUE IN TODAY'S VEHICLES

NUMBERS TELL THE MEMA STORY

2.4% OF THE U.S.

GDP GENERATED BY THE MOTOR VEHICLE PARTS MANUFACTURING INDUSTRY



Economic contribution to the U.S. GDP generated by the motor vehicle parts manufacturing industry and its supported activity in 2015 – 2.4% of U.S. GDP

(up 0.2 share points from 2012)



47 PERCENT

The percent of total direct employment in the top five states-MI, OH, IN, TN, KY



Total employee
compensation paid to
workers supported by
the motor vehicle parts
manufacturing industry in
2015- a rise of 22% from
\$221 billion in 2012 is 2.8%
of total U.S. employee
compensation

(up 0.2 share points from 2012)



Total employment impact of the motor vehicle parts manufacturing industry in the U.S. – rising nearly 18% from 3.62 million in 2012



Additional employment-induced jobs within the U.S.



Indirect jobs generated by supply chain effect of direct jobs

MEMA'S MEMBER COMPANIES

ARE THE LARGEST SECTOR OF

MANUFACTURING JOBS IN THE U.S.

MEMA'S MEMBERS ARE REPRESENTED THROUGH FOUR DIVISIONS, EACH WITH ITS OWN DISTINCT MARKET SEGMENT

WE ARE **MEMA**, THE **MOBILITY INDUSTRY ASSOCIATION**

SUPPLIERS ARE A DRIVING FORCE IN THE MOTOR VEHICLE INDUSTRY.

Through its four specialized divisions, MEMA's members are transforming mobility through innovation and technology while generating environmental improvements through sustainability. We are focused on vehicle safety and making a strong contribution to the U.S. economy.













THE AUTOMOTIVE AFTERMARKET SUPPLIERS ASSOCIATION

Sector: Automotive; Light-Duty

Market: Aftermarket

Whether it is for "do-it-yourselfers," independent repair professionals, or a vehicle manufacturer's dealership service facility, the automotive light vehicle aftermarket supplies vehicle parts, chemicals, tools, equipment, and accessories that help maintain more than 260 million light vehicles in operation in the U.S. The Automotive Aftermarket Suppliers Association represents hundreds of companies that provide the parts and technologies needed to repair and maintain these vehicles every day. AASA is a recognized industry change agent – promoting a collaborative industry environment, providing a forum to address issues, and serving as a valued resource for members.

As the average age of motor vehicles on U.S. roads nears 12 years, parts manufacturers play a vital role in ensuring the availability of repair and maintenance parts to ensure the safety of motorists. Serving the needs of the aftermarket has led to consistent growth in jobs related to the sector.

140,000

145,000

3.6%

INCREASE





THE **HEAVY DUTY MANUFACTURERS ASSOCIATION**

Sector: Commercial Vehicle; Heavy-Duty; Off-Highway

Market: Original Equipment; Aftermarket

The vast majority of goods in the United States are transported on the nation's highways by commercial vehicles like medium- and heavyduty vehicles. In addition, the nation relies on school and transit buses, emergency vehicles, and agricultural and other off-road vehicles to support our economy, maintain our infrastructure, and increase our quality of life.

The Heavy Duty Manufacturers Association represents the manufacturers of original equipment and aftermarket parts and technologies that help create new commercial and maintain in-service vehicles that are safe and energy efficient.

-171,000---203,000----1<mark>8.7</mark>%

DIRECT U.S. JOBS IN 2012

DIRECT U.S. JOBS IN 2015

INCREASE



THE MOTOR & EQUIPMENT REMANUFACTURERS ASSOCIATION

Sector: Automotive; Light-Duty; Commercial Vehicle;

Heavy-Duty; Off-Highway; Other

Market: Aftermarket

The U.S. is the world's largest producer, consumer, and exporter of remanufactured goods, and the Motor & Equipment Remanufacturers Association represents 125 companies in the remanufacturing sector. U.S. production of remanufactured goods (in all sectors) totaled at least \$43.0 billion in 2011. U.S. remanufacturing activities supported at least 180,000 full-time jobs in the U.S. MERA represents motor vehicle parts remanufacturers as well as remanufacturers in other industries.



The Federal Vehicle Repair Cost Savings Act of 2015 prioritizes the use of remanufactured parts when servicing the federal civilian vehicle fleet. In 2016, MERA announced its Manufactured Again Certification program, which is tied to ISO 9001 and IATF 16949, two internationally recognized quality standards. ISO 9001 can be used by any organization, large or small,

regardless of its field of activity. IATF 16949—a sector specific requirement that is a supplement to ISO 9001—is one of the automotive industry's most widely used international standards for quality management. With the program, companies can now certify that their remanufacturing processes meet quality management standards more generally associated with new manufacturing. This certification also allows all buyers to confidently identify—and purchase—remanufactured products.

REMANUFACTURED GOODS EMPLOYMENT [2011]

SECTORS RANKED BY GDP

- 1. Aerospace
- 2. HDOR Equipment
- 3. Motor Vehicle Parts (automotive)
- 4. Machinery
- 5. IT Products

- 6. Medical Devices
- 7. Retreaded Tires
- 8. Consumer Products
- 9. All Other
- 10. Wholesalers

TOTAL: 180,000

^{*}Source: International Trade Commission, 2011





THE ORIGINAL EQUIPMENT SUPPLIERS ASSOCIATION

Sector: Automotive; Light-Duty

Market: Original Equipment

With more than two-thirds of a car's value generated by suppliers, the Original Equipment Suppliers Association is driving advances in technology in the Mobility Industry. OESA members directly impact the industry's emerging consumer lifestyle technologies and develop systems that can reduce traffic fatalities and improve safety on roads worldwide. OESA members work side-by-side with vehicle manufacturers to ensure that technologies that can save and improve lives are available to consumers in the 300 light vehicle models that are offered for sale in the U.S.

Given the size of the role they play in the motor vehicle industry, OE suppliers make up the majority of direct employment in the motor vehicle parts manufacturing industry. OESA has seen a 23.3 percent growth in employment since 2012, representing 523,000 direct jobs in the U.S.

424,000 ··· 523,000 ··· 23.3[%]

DIRECT U.S. JOBS IN **2015**

INCREASE

DIRECT U.S. JOBS IN 2012

DRIVING **ECONOMIC GROWTH**BY COMBINING **MANUFACTURING**AND **TECHNOLOGY**

Manufacturing jobs in America are growing. Over the next decade, we anticipate that 3.5 million new jobs will be created in the general manufacturing sector.* With new technologies transforming the Mobility Industry, many of those new jobs will be well-paid, high-tech jobs related to vehicle parts suppliers. In 2014, the average manufacturing worker in the U.S. earned nearly \$80,000 per year.

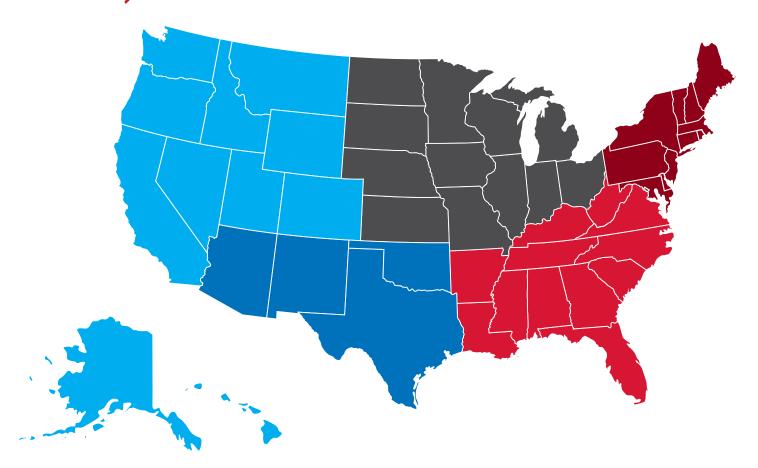
High-tech industries are a critical part of the U.S. economy, employing nearly 17 million workers in 2014. The high-tech sector, defined as industries having high concentrations of workers in STEM (Science, Technology, Engineering, and Mathematics) occupations, has begun to take an ever-larger role as parts suppliers and the motor vehicle manufacturing industry make revolutionary new technical advances. There is no doubt that innovators in traditional STEM occupations are crossing over into the fast-changing world of motor vehicle manufacturing.





The Mobility Industry is a significant contributor to the growth of the manufacturing and high-tech sectors. And **MEMA** is pulling it all together.

871,831 TOTAL U.S. DIRECT EMPLOYMENT



SOUTHWEST



2012

2015

WEST



2012

2015

MIDWEST



2012

49%

2015

NORTHEAST



2012

2015

SOUTHEAST



2012

2015

32%

871,831 TOTAL U.S. DIRECT EMPLOYMENT

MICHIGAN 125,909 OHIO 96,238 INDIANA 88,306 **TENNESSEE** 50,128 KENTUCKY 47,658 ALABAMA 41,107 **ILLINOIS** 38,394 **NORTH CAROLINA** 33,825 SOUTH CAROLINA 33,766

TEXAS 33,132 **CALIFORNIA** 31,190 **PENNSYLVANIA** 27,920 **GEORGIA** 23,836 **NEW YORK** 19,517 WISCONSIN 18,200 MISSOURI 16,301 IOWA 16,114 VIRGINIA 13,277

ARKANSAS 10,495 **MISSISSIPPI** 9,706 **FLORIDA** 8,827 **OKLAHOMA** 8,676 **NEBRASKA** 8,415 UTAH 7,884 MINNESOTA 6,366 **KANSAS** 6,270 CONNECTICUT 4,958

4,687 **ARIZONA** 4,672 OREGON 4,473 WEST VIRGINA 4,069 **NEW JERSEY** 4,028 SOUTH DAKOTA 3,931 LOUISIANA 3,167 COLORADO 3,120 **MASSACHUSETTS** 2,510

WASHINGTON

NORTH DAKOTA 1,994 **RHODE ISLAND** 1,879 MARYLAND 1,720 **NEW HAMPSHIRE** 1,389 VERMONT 745 **IDAHO** 616 MAINE 549 **NEW MEXICO** 525 **NEVADA** 484

DELAWARE 400 MONTANA 269 **WYOMING** 136 **ALASKA** 30 HAWAII 21 WASHINGTON D.C.



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"MEMA: Driving the Future" is based on research undertaken by IHS Markit on behalf of the Motor & Equipment Manufacturers Association (MEMA).

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