

JAMA

JAPAN AUTOMOBILE MANUFACTURERS ASSOCIATION, INC.



JAMA IN AMERICA: A Strong Commitment to Manufacturing & the American Workforce

2018-2019

CONTRIBUTIONS REPORT



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Japanese-brand automakers have a decades-long track record of investing in U.S. manufacturing and strengthening America's R&D and design base. The investment trendline has steadily increased over the years, and now it is closing in on \$50 billion cumulative investment in manufacturing alone. Our member companies' history of building automobiles in the U.S. is an impressive story that reflects the work of millions of Americans across the country.

In the 1980s, JAMA members established automobile and engine manufacturing plants in Ohio, Tennessee, Kentucky, and Indiana. And now, 36 years later, our members have a significantly expanded presence across the U.S., operating 24 manufacturing facilities and 44 R&D/design centers in 19 states.

The subsequent growth of our members' U.S. economic impact is remarkable. In 1990, when all JAMA members currently producing passenger vehicles in the U.S. had established American plants, our members' cumulative U.S. manufacturing investments totaled \$6.2 billion. By the end of 2017, our members had:

- Invested \$48.3 billion in U.S. manufacturing
- Increased vehicle production by 153%
- Increased direct employment by 224%

In 2017, our members set a new record for direct U.S. jobs, surpassing 92,000 employees. Our members' dealership networks provide more than 350,000 jobs, supporting local economies in every state in the country. Together, JAMA members' direct U.S. operations and dealer networks support hundreds of thousands of additional parts supplier, logistics, and spin-off jobs. Also in 2017, our members purchased more than \$70 billion in U.S.-made auto parts for manufacturing and service departments, while exporting more than 420,000 vehicles to dozens of countries around the world from their U.S. plants.

The trend continues with the recently announced \$1.6 billion Toyota-Mazda joint venture, set to begin production in Huntsville, Alabama by 2021. This investment will provide up to 4,000 direct jobs and support thousands more in supplier, logistics, and spin-off employment.

In addition to their quantifiable direct economic impact, Japanese-brand automakers have established workforce development initiatives that promote the up-skilling and professional growth of their existing employees. This cultivates new high-skilled talent into their organizations, and injects significant expertise, technology, and financial resources into the workforce pipeline in ways

that also benefit other members of their communities and related industries. By doing so, JAMA members are ensuring the long-term success and sustainability of their U.S. operations, which increasingly require high-skilled employees. This activity also directly promotes the long-term sustainability of the broader automotive and manufacturing industries in the United States.

Leveraging partnerships with local and national educational institutions, from primary and secondary schools to technical colleges, universities, and advanced research institutions, JAMA members are playing a direct role in transforming the delivery of education in ways that will develop a talent pipeline for the American workforce of the future. All of these efforts provide students with rewarding learning experiences and career pathways. Whether or not they pursue careers with one of our members, many of these young people will go on to careers in technology-integrated manufacturing, robotics, and other advanced fields. In this way, our members are doubling down on the future of the American auto industry and the capacity of the country to thrive in an evolving global economy.

As time goes on, more and more Americans enjoy the safety, reliability, fuel-efficiency, and innovative design that JAMA member vehicles offer. The auto industry is also changing, as innovation in connectivity, autonomous driving, artificial intelligence, fuel cell and electric vehicle technologies advance. And JAMA members are at the forefront of those changes.

Maintaining the global competitiveness of the U.S. auto industry amidst this evolution means focusing on challenges with forward-thinking approaches. Through smart policies that expand opportunities for the effective integration of technology, manufacturing, and motor vehicle transportation, the U.S. auto industry can continue to hone its competitive edge, strengthening and growing the American manufacturing, R&D, and design bases for years to come.

Manny Manriquez
General Director
JAMA USA

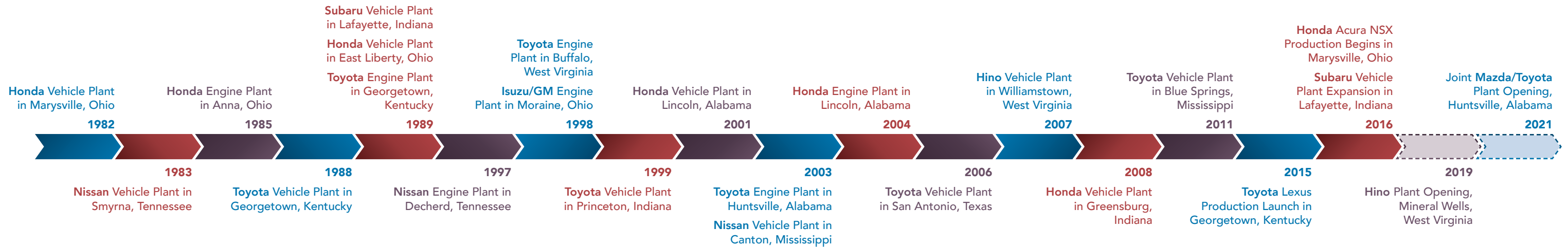


MANUFACTURING IN AMERICA

Since the first Japanese-brand automobile manufacturing facility was built in the U.S. in the early 1980s, JAMA members have continuously increased their investment in America, making a positive impact in the communities where they operate, and creating high-quality jobs. New manufacturing investments are underway in Alabama and West Virginia.



Subaru of Indiana Automotive marks 5 million vehicles produced (2016)



Honda celebrates its 25 millionth automobile produced in the U.S. (2018)



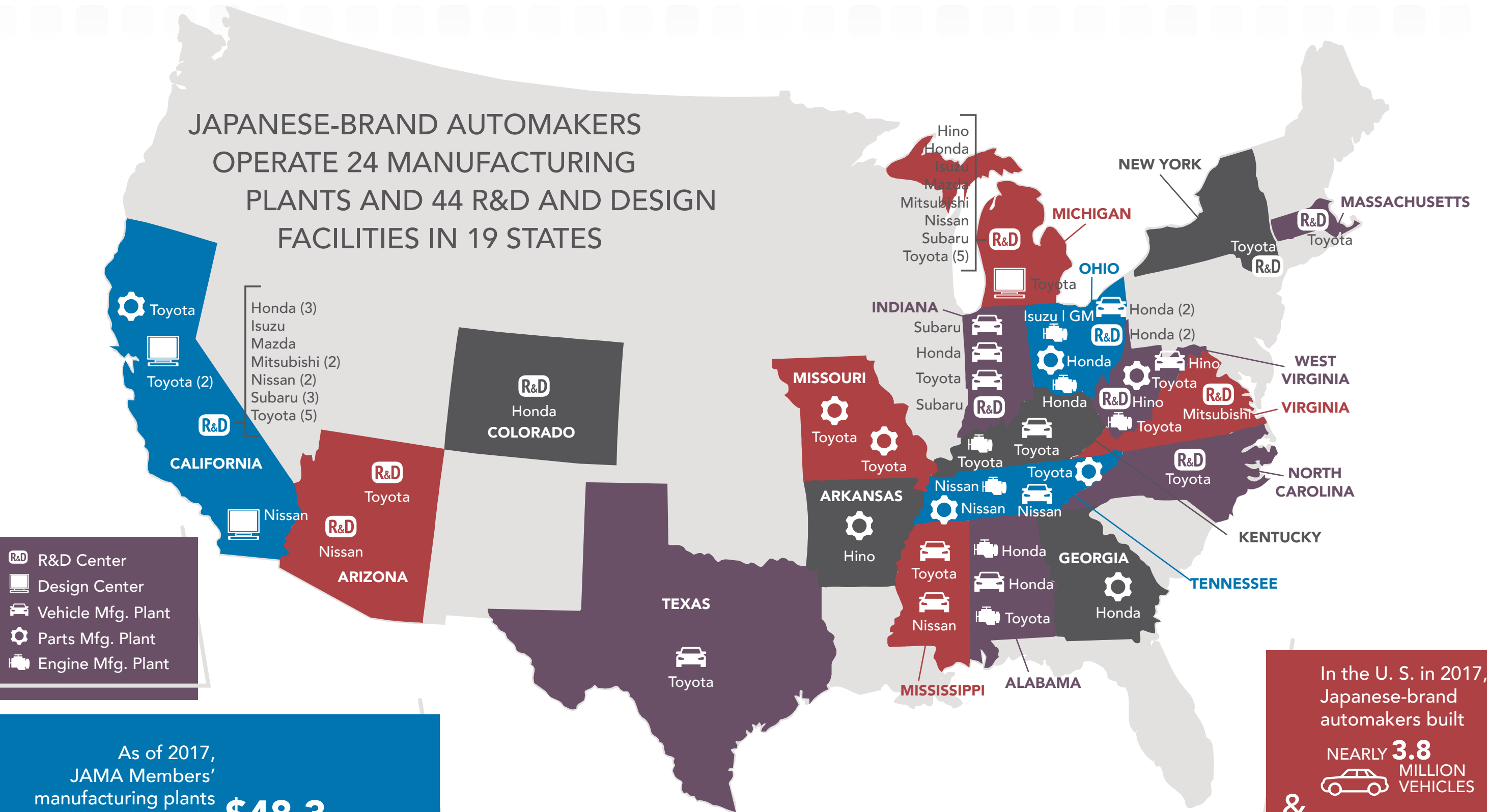
Nissan Canton Plant in Mississippi produces its 4 millionth vehicle (2018)



Toyota Motor Manufacturing Alabama in Huntsville builds its 5 millionth engine (2017)

JAMA MEMBERS' U.S. ECONOMIC IMPACT

JAPANESE-BRAND AUTOMAKERS
OPERATE 24 MANUFACTURING
PLANTS AND 44 R&D AND DESIGN
FACILITIES IN 19 STATES



As of 2017,
JAMA Members'
manufacturing plants
cumulatively invested **\$48.3** BILLION
in the U.S. Economy

In the U. S. in 2017,
Japanese-brand
automakers built

NEARLY **3.8**
MILLION
VEHICLES

&

4.4
MILLION
ENGINES

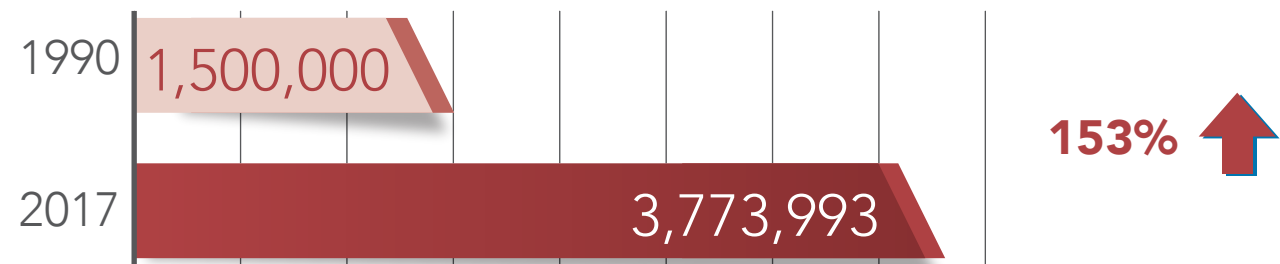
JAMA MEMBERS' U.S. ECONOMIC IMPACT

JAMA members have proven their commitment to America through significant increases in manufacturing investment, production, employment, U.S.-made parts purchases, and exports.

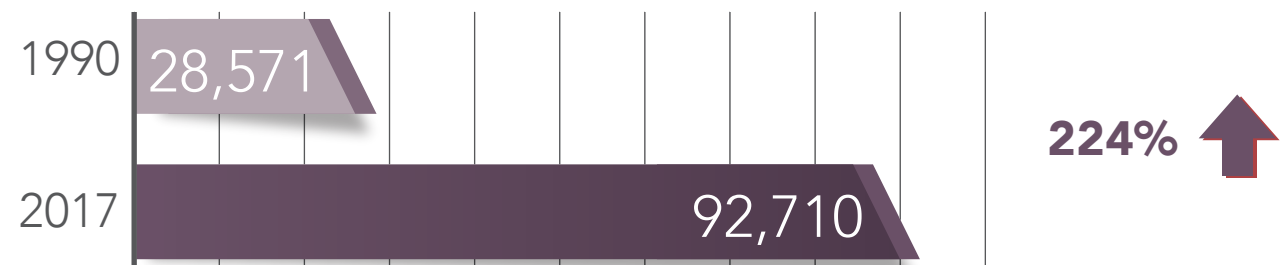
CUMULATIVE MANUFACTURING INVESTMENT (USD)



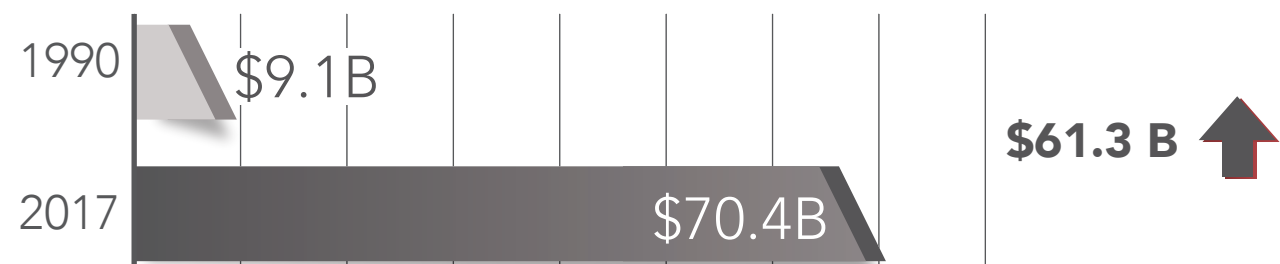
AUTOMOTIVE PRODUCTION (UNITS)



DIRECT EMPLOYMENT



PARTS PURCHASED (USD)



Investment data on Japanese 1990 fiscal year basis; Parts Purchases occur on an annual basis

2017 U.S. EMPLOYMENT

65,526

MANUFACTURING EMPLOYEES

+ **5,759**

R&D/DESIGN CENTER EMPLOYEES

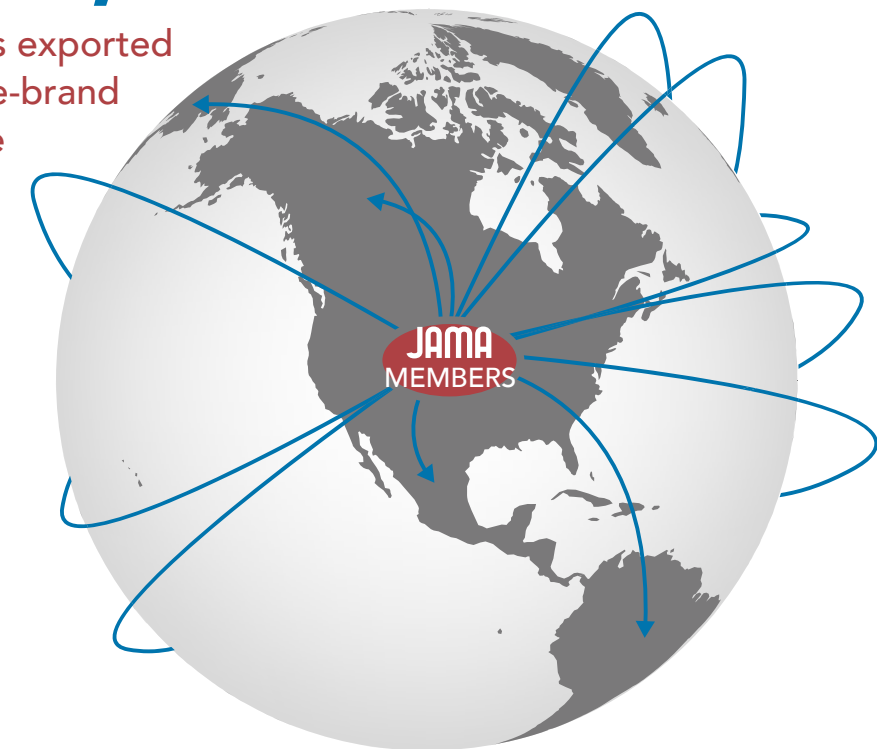
+ **21,425**

HQ, SALES & OTHER EMPLOYEES

= 92,710

TOTAL DIRECT AMERICAN JOBS

423,415
Cars & trucks exported from Japanese-brand auto plants in the U.S. in 2017



WORKFORCE DEVELOPMENT

JAMA members are committed to supporting the professional growth of their employees. Through advanced workforce development programs, they empower team members to learn and develop new skills throughout their careers. They also partner with local schools, colleges, and universities to provide students with the tools and knowledge to thrive in the workforce of the future.

HONDA

To prepare for production of the 2018 Accord in Marysville, Ohio, Honda used its nearby Technical Development Center to ensure associates had the required skills to operate new production technologies.



SUBARU

Subaru of Indiana Automotive, Inc. (SIA) has been a proud supporter of Indiana's Department of Workforce Development, facilitating training and mentoring for community members who encounter career challenges. Local citizens who may be under-employed or suffering from long-term unemployment can enroll in this grant-funded education system to prepare for success. Instructors from SIA lead up to 30 individuals at a time, 10 times a year, through 160, hours of instruction including 24 hours of hands-on work simulation. SIA training staff also help mentor and coach the participants with interview techniques, interpersonal communications, attention to detail, following instructions and completing work assignments accurately.

NISSAN

In 2017, Tennessee Gov. Bill Haslam and Tennessee Board of Regents Chancellor Flora Tydings joined Nissan officials to formally open the Tennessee College of Applied Technology at Murfreesboro's Smyrna Campus and Nissan Training Center. The state-of-the-art campus offers high-quality programs to prepare Tennessee students and Nissan employees for careers in advanced manufacturing and other fields.



TOYOTA

Toyota's Technician Training & Education Network (T-TEN) is a partnership between Toyota, community colleges, vocational schools, and Toyota and Lexus dealerships. The program provides state-of-the-art, hands-on education and training for automotive diagnosis and repair. T-TEN helps develop and place thousands of factory-certified technicians in challenging, rewarding, and well-paid positions in dealerships across the country.

SUPPORTING LOCAL COMMUNITIES

HINO Hino Motors Sales U.S.A., Inc., and Hino Motors Manufacturing U.S.A., Inc. have supported communities in West Virginia and Arkansas by providing students there with approximately \$95,500 in scholarships. Hino also contributes through volunteer work and donations to local police departments as well as food and toy drives.



HONDA In April 2018, Honda participated for the first time in the USA Science & Engineering Festival in Washington, D.C., showcasing what is possible when knowledge is used to turn ideas and dreams into reality. Honda's humanoid robot, ASIMO, and the personal mobility device called UNI-CUB were the centerpiece of Honda Robotics demonstrations at the festival. The demonstrations gave students the chance to see the important influence of science, technology, engineering, and mathematics (STEM) education on creating Honda Robotics technology. The festival is the largest annual STEM-based event in the United States.



MAZDA Since 2012, Mazda North American Operations has supported Project Yellow Light, a safe driving education program targeted at young people. Every year, Project Yellow Light challenges teens to create 60-second public service announcement videos to encourage their peers to avoid distracted driving. Also, young racing drivers who are a part of Mazda Motorsports conduct awareness-raising activities for young people about the dangers of texting while driving.



MITSUBISHI Hurricane Maria caused devastating destruction in Puerto Rico. Mitsubishi Motors North America, Inc., donated \$10,000 to the American Red Cross to support those impacted. Mitsubishi Motors R&D of America Inc. (MRDA) also made a contribution of \$2,000, and employees donated \$1,260. Mitsubishi Motors North America, Inc., also collected gifts in December for the U.S. Marine Corps Reserve's Toys for Tots Foundation as part of its annual corporate social responsibilities effort. Overall, the Cypress campus donated an impressive amount, with more than 320 items contributed.



NISSAN For 15 years, Nissan has remained committed to supporting Mississippi historically black colleges and universities (HBCUs). Over that time Nissan has contributed nearly \$2 million to HBCUs for a variety of causes and programs. Nissan's most recent \$250,000 investment supports science, technology, engineering, and mathematics (STEM) programs at seven HBCUs in Mississippi. The company recently was recognized by US Black Engineer & Information Technology Magazine as a 2018 Top Supporter of HBCU Engineering Schools.



SUBARU Subaru of Indiana Automotive, Inc. (SIA), routinely opens its grounds to host 5K walks and other fundraising events for nonprofit organizations. For example, SIA hosts the Foot Pursuit benefitting local police, the Alzheimer's Association's "Walk to End Alzheimer's" event, the American Cancer Society's Making Strides Against Breast Cancer event. SIA also has an Associate Volunteer Program, Subaru Serves, that encourages community volunteerism. SIA organizes two volunteer events for Associates each year in the Lafayette community. In 2017, Subaru Serves volunteered at a food pantry and an animal shelter.



TOYOTA One of the unique ways Toyota supports communities is through the Toyota Production System Support Center, Inc. (TSSC). For 25 years, Toyota has collaborated with more than 340 organizations to help them become more productive, maximize available resources, and improve quality and safety -- the philosophies of the Toyota Production System (TPS). Recent TSSC projects include improving emergency room operations at a North Texas hospital and eliminating waste at a Meals on Wheels organization.



ENVIRONMENTALLY FRIENDLY VEHICLES

More than **70%** of alternative-powered vehicles on U.S. roads are Japanese-brand autos.

HINO

Hino 195h Diesel-Electric Hybrid cab-over represents a giant leap for alternative fuel commercial vehicles in North America. It is designed from the ground-up for the U.S. and arrives with the benefit of six generations of technology evolution and more than 10,000 production vehicles already on the road around the world, solidifying Hino as the leader in commercial truck diesel-electric hybrid technology.



MITSUBISHI

The environmentally friendly all-new 2018 Outlander PHEV recently launched in the United States and is available in dealerships across the country. The Outlander PHEV model combines Mitsubishi's strengths in SUVs and electric efficiency.



HONDA

The new Accord Hybrid joins the Accord 1.5T and 2.0T in Honda's all-new, award-winning 10th-generation Accord lineup. Accord Hybrid joins an expanding lineup of electrified Honda vehicles that includes the Clarity series – Clarity Fuel Cell, Clarity Electric, and Clarity Plug-In Hybrid – and forthcoming 2019 Insight compact hybrid sedan. These models represent the next generation of Honda vehicles as the company advances toward its global initiative to grow electrified vehicle sales to two-thirds by 2030.



NISSAN

The all-new Nissan LEAF sets a new standard in the growing market for mainstream electric vehicles, offering greater range, advanced technologies such as ProPILOT assist and ePedal, and a dynamic new design. Nissan LEAF continues to be the best-selling 100% electric vehicle in the U. S. and the world.



MAZDA

Mazda has always sought to strike an ideal balance between fuel efficiency and performance. The 2018 Mazda6 SKYACTIVR-G 2.5L2 engine incorporates Cylinder Deactivation, a system that shuts down two of the engine's four cylinders in certain driving conditions, such as cruising at constant speeds between about 25-50 miles per hour.



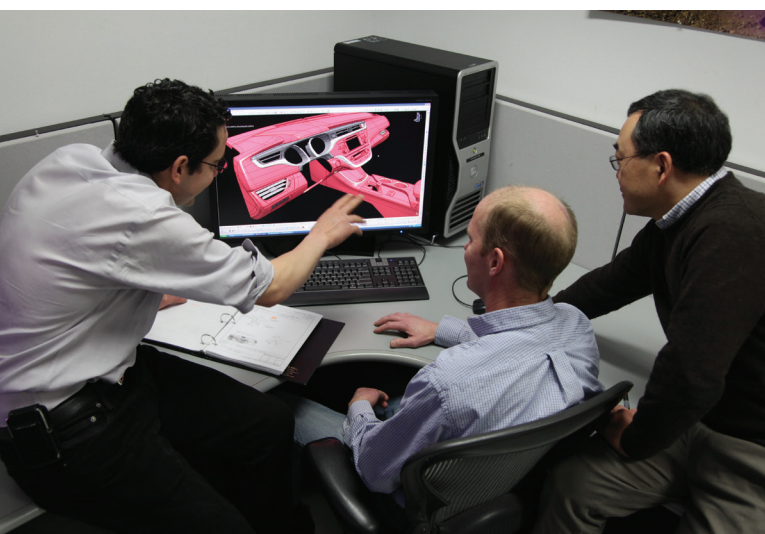
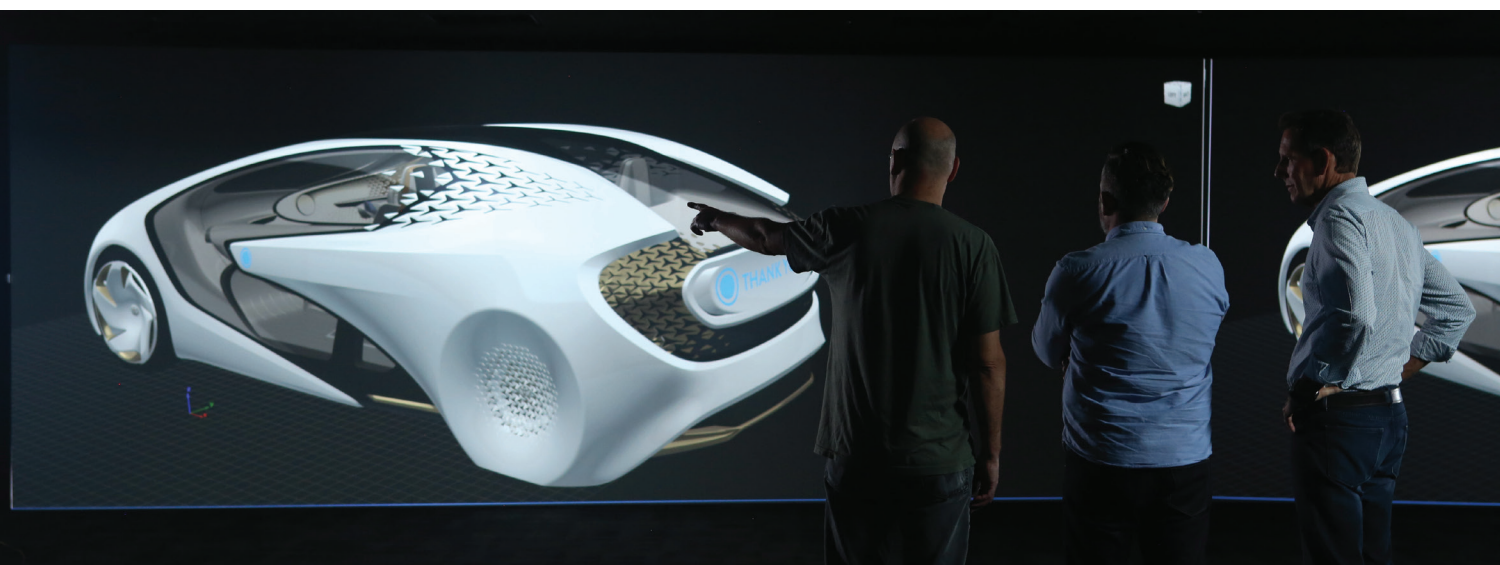
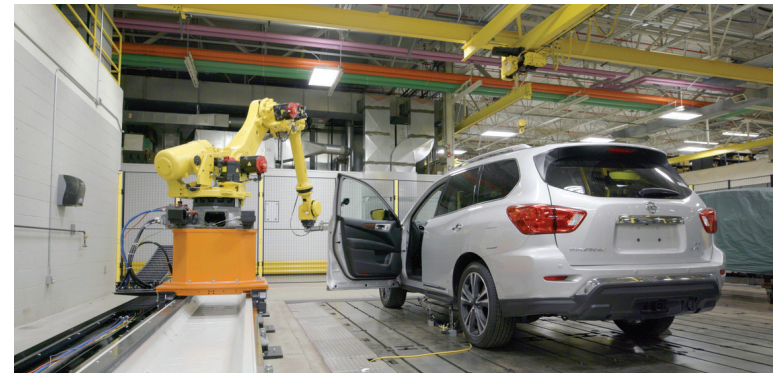
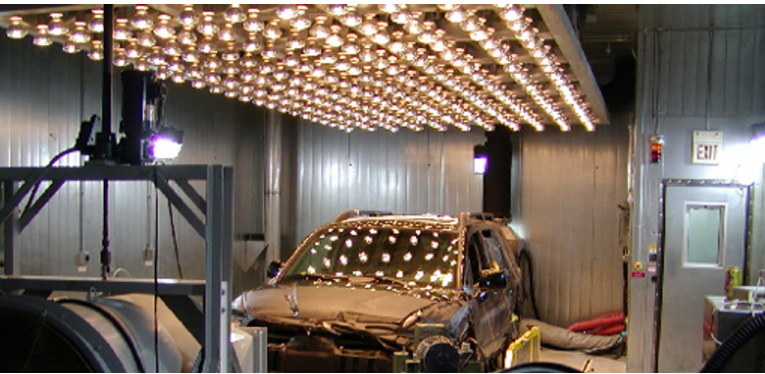
TOYOTA

Toyota remains at the forefront of alternative-powered, next-generation vehicles with the Mirai. The Mirai hydrogen fuel cell electric vehicle combines hydrogen and oxygen to make electricity onboard, while emitting nothing but water vapor. It is a zero-emission vehicle with an EPA-estimated driving range of 312 miles, and refuels in around five minutes.



R&D, DESIGN, & TEST CENTERS

Japanese-brand automakers conduct R&D and design for the U.S. market right here in America. Their U.S.-based centers always strive to deliver the most innovative automotive technology and skillfully-designed vehicles for consumers in America and throughout the world.



COMPANY	R&D, DESIGN, AND TEST CENTERS	CURRENT FUNCTIONS
Hino Motors Manufacturing U.S.A., Inc.	Farmington Hills, MI; Williamstown, WV	1,2,3,5,6,7,8
Honda R&D Americas, Inc.	Torrance, Los Angeles, & Mountain View, CA; Raymond & Columbus, OH; Detroit, MI; Denver, CO	1,2,3,4,5,6,7,8
Isuzu Technical Center of America, Inc.	Plymouth, MI; Garden Grove, CA	1,2,3,5,6,7,8
Mazda North American Operations, Inc.	Irvine, CA; Wixom, MI	1,2,3,4,5,6,7,8
Mitsubishi Motors R&D of America, Inc.	Ann Arbor, MI; Cypress, CA; Arlington, VA	2,3,8
Nissan Technical Center North America	Farmington Hills, MI; West Sacramento and Sunnyvale, CA; Stanfield, AZ	1,2,3,5,6,7,8
Nissan Design America	San Diego, CA	4
Subaru Research and Development, Inc.	Cypress, Fremont, and Tustin, CA; Lafayette, IN; Ann Arbor, MI	1,2,3,4,6,8
Toyota Motor North America Research & Development (formerly Toyota Technical Center)	Ann Arbor, Livonia, Plymouth, & Saline, MI; Gardena, Sacramento, & Silicon Valley, CA	1,2,3,5,6,7
Toyota Arizona Proving Ground	Wittmann, AZ	
Calty Design Research, Inc. (Toyota)	Newport Beach & San Francisco (Toyota Innovation Hub), CA; Ann Arbor, MI	4,6
Toyota InfoTechnology Center	Mountain View, CA; New York, NY	3,7,8
Toyota Research Institute	Ann Arbor, MI; Cambridge, MA; Palo Alto, CA	8
TRD, U.S.A., Inc.	Salisbury, NC	2,3,8

KEY TO CURRENT FUNCTIONS:

- 1. Technical support for procurement of parts for local production
- 2. Evaluation of parts
- 3. Evaluation of vehicles
- 4. Styling & general design
- 5. Parts design
- 6. Vehicle design
- 7. Prototype production
- 8. Technical support & marketing research

JAMA MEMBERS' PRODUCTION, EMPLOYMENT, & INVESTMENT IN THE U.S.

	COMPANY	LOCATION	PRODUCTS	UNITS PRODUCED IN 2017	PRODUCTION CAPACITY	EMPLOYEES	TOTAL INVESTMENT (\$ MILLION)
HINO	Hino Motors Manufacturing U.S.A., Inc.	Marion, AR	Differential, Rear Axle & Suspension	385,593	628,772	786	342
			Related parts for Toyota vehicles				
HONDA	Honda of America Manufacturing, Inc.	Williamstown, WV	Class 6-7 Commercial Vehicles	8,629	12,000	510	68
		Marysville, East Liberty & Anna, OH	Accord Sedan, CR-V, Acura ILX, Acura TLX, Acura RDX, Acura MDX	610,756	680,000 -Marysville 440,000 -East Liberty 240,000	9,800	7,020 -Marysville 5,200 -East Liberty 1,750 -PMC 70
			Engines	1,051,715	1,180,000		2,600
		Russels Point, OH	Automatic Transmissions	826,904	1,000,000		
			Gear Sets	839,334	970,000	1,100	871
			4WD Differential Gear	207,516	160,000		
			4WD Transfer Cases	205,112	200,000		
		Lincoln, AL	Odyssey, Ridgeline, Pilot	357,341	340,000	4,500	2,600
		Tallapoosa, GA	Automatic Transmissions	354,345	340,000		
		Greensburg, IN	Civic Sedan, CR-V	303,926	375,000	500	410
ISUZU	DMAX, Ltd.		Diesel Engines	150,573	174,000	777	674
		Moraine, OH (Joint Venture: GM)					
NISSAN	Nissan Smyrna Vehicle Assembly Plant and Battery Plant	Smyrna, TN	Altima, Leaf, Maxima, Pathfinder, Rogue, Infiniti QX60	628,111	640,000	8,400	6,400
			Lithium-Ion Batteries	N/A	N/A		
		Decherd, TN	Engines	1,035,208	1,500,000	1,600	1,200
		Decherd, TN	Engines			300	325
SUBARU	Nissan Canton Vehicle Assembly Plant	Canton, MS	Altima, Frontier, Murano, NV Passenger, NV Cargo, Titan	302,475	450,000	6,400	3,400
		Lafayette, IN	Legacy, Outback, Impreza	363,414	390,000	5,653	2,106
			Sub-assemblies	713,979	4,600,000	300	386
TOYOTA	TABC Inc. (TABC)		Stamping parts	4,468,343	24,000,000		
			Front arms	356,092	1,000,000		
		Georgetown, KY	Camry, Camry Hybrid, Avalon, Avalon Hybrid, & Lexus ES350	420,553	550,000	8,000	7,483
			Engines	413,487	650,000		
		St. Louis & Troy, MO Jackson, TN	Engines brackets, Differential Carrier Covers	562,943	514,000	1,300	695
			Cylinder heads	2,686,328	3,198,825		
			Cylinder blocks	1,843,616	2,029,010		
			Transmission Case & Housing	582,376	653,663		
		Buffalo, WV	Engines	713,917	920,000	1,600	1,470
			Transmissions	329,962	350,000		
TOYOTA	Toyota Motor Manufacturing Indiana, Inc. (TMMI)	Princeton, IN	Sienna, Highlander, Highlander Hybrid, & Sequoia	412,438	389,000	5,400	4,545
		Huntsville, AL	Engines	693,829	710,000	1,400	865
TOYOTA	Toyota Motor Manufacturing Texas, Inc. (TMMTX)	San Antonio, TX	Tundra, Tacoma	266,723	208,000	3,200	2,722
		Blue Springs, MS	Corolla	163,832	170,000	1,500	1,056
TOTAL				3,773,993	VEHICLES 2017	65,526	48,338
				4,413,074	ENGINES 2017		

JAMA WORLDWIDE



JAMA

Japan Automobile Manufacturers Association, Inc.



For more information please visit us online at www.jama.org and follow us on Twitter @JapanAutosUSA

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