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Japan Automobile Manufacturers: Creating Economic Growth and Jobs in America

Head Office

Jidosha Kaikan, 1-30, Shiba Daimon 1-Chome
Minato-ku, Tokyo 105-0012, Japan
Tel: 81-3-5405-6126
Fax: 81-3-5405-6136
<http://www.jama.or.jp> (Japanese)
<http://www.jama-english.jp> (English)

Asia

Singapore Representative Office
143 Cecil Street #09-03/4
GB Bldg., Singapore 069542
Tel: 65-6221-5057
Fax: 65-6221-5072

Beijing Representative Office
Unit 1001B, Level 10 • China World Tower 2
No. 1 Jian Guo Men Wai Avenue
Beijing 100004 China
Tel: 86-10-6505-0030
Fax: 86-10-6505-5856

North America

U.S. Office
1050 17th Street, NW, Suite 410
Washington, DC 20036-5518, USA
Tel: 202-296-8537
Fax: 202-872-1212
<http://www.jama.org>

Europe

European Office
Avenue Louise 287 • Box 9
1050 Brussels, Belgium
Tel: 32-2-639-1430
Fax: 32-2-647-5754



NEW JOBS

INVESTMENT

Growth

U.S. EXPORTS

LOCAL PRODUCTION



JAMA in the News 2012



Honda Hiring 300 and Will Make Hybrid Cars in Indiana from USA Today, July 18, 2012



Nissan to Produce Sentra at Canton, Add Jobs from Reuters, June 28, 2012



Toyota Celebrates Production Start at New U.S. Plant from Associated Press, November 17, 2011



West Virginia Governor Announces Hino Truck Plant Expansion from Associated Press, June 21, 2012



Governor Announces Launch of 2013 Mitsubishi Outlander Sport in Illinois from Examiner.com, July 19, 2012



Driver's Seat: Mazda's Crossover to Get Excited About from Philadelphia Inquirer, June 28, 2012



Subaru's 2012 Small Car Is Value Priced, Careful with Fuel from Associated Press, July 18, 2012

Reborn in America: An Automobile Industry Inspired by Innovation and Enlivened by Competition

The world of international trade has turned upside down since the Japan Automobile Manufacturers Association (JAMA) was formed in 1967. While the U.S. and Japan remain close partners with each other and the world, with all the tensions and benefits that relationship implies, the nature of trade and the structure of competition have changed so dramatically that whole industries have been remade in the process. The automotive industry is an example.

The competition injected into the U.S. auto marketplace by JAMA member companies created incentives for more choices, higher quality, and lower prices, as the *Kaizen* approach to manufacturing drove efficiencies and improvements along the production line to new heights. The Japanese business model introduced new concepts in labor relations, worker participation, and increased productivity. This has brought new efficiencies, new technologies, and a new enthusiasm to the American auto industry, all to the benefit of the car-buying public. As a result, a newly energized and much healthier automotive industry has been born in the U.S. Once again, U.S. and Japanese companies, in competition and to each other's benefit, are transforming not only themselves but also the global marketplace in which they operate.

You will read in the pages that follow evidence of the continued and important presence in our business model of certain labor practices and *Kaizen*. Innovation, however, has become at least as important to JAMA member growth and success, and may become the most critical field of competition in the years to come. Examples of competition in innovation between our companies and with other global automakers are included in this brochure. We hope they will excite you as they do us. The practical benefit of our vision and speed to market can be seen on American roads at this moment in the predominance of our eco-friendly, fuel-efficient vehicles.

Once a largely export-oriented group of companies, since 1967 we increasingly have changed our model to build in the nations where we sell our cars. Our investments in the U.S., for example, reached more than \$35 billion by last year, which has led to the employment of more than 388,000 manufacturing, R&D, dealership, and distributor workers here. Nature joined with the pressures of competition to force yet another look at another aspect of our model in 2011. The earthquake and tsunami in Japan that year spurred us to re-examine the limits of our just-in-time supply practices, and the length of our supply chains — not only to our companies, but also to the many others around the world that buy Japanese parts.

JAMA companies are still exporting vehicles. But our commitment to the U.S. market, our investment here, and the evolution of our business model are part of the reason we think international trade has turned upside down in the years since our inception. Today, JAMA companies manufacture and export nearly 17 percent of new vehicle shipments from the U.S. to the world. When you consider our role in U.S. exports, as well as the fact that we produce in North America nearly 70 percent of all the cars we sell here, we think our companies have earned the right to take our place as full partners in a newly invigorated American automobile industry.



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Auto Production, Investment, and R&D Create U.S. Jobs

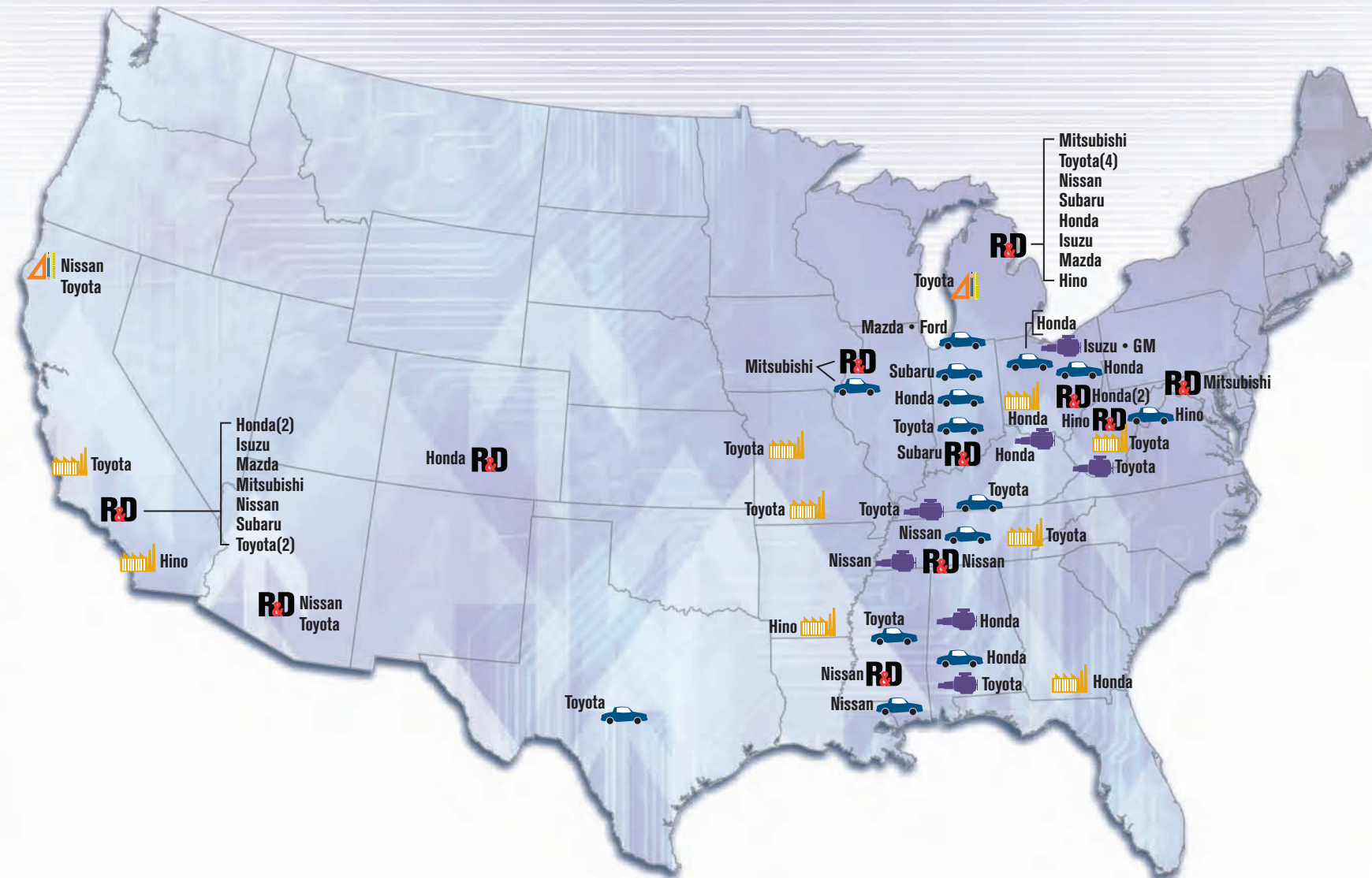
Japanese automakers (including distributors) and their dealers employed 388,256 Americans in 2011. Of these, 30 manufacturing plants employed 53,693, while the automakers' 34 major R&D and design centers employed 4,013. Dealers and distributors employed the rest. (Please see the map for facility locations and types and the chart below for detailed employment figures.)



Mitsubishi Motors North America, Inc. • Normal, Illinois



Honda of America Manufacturing, Inc. • Marysville, Ohio



Toyota Calty Design Research, Inc. • Newport Beach, California



Nissan North America, Inc. • Decherd, Tennessee



Hino Motors Manufacturing, U.S.A, Inc. • Williamstown, West Virginia



Subaru Research and Development, Inc. • Ann Arbor, Michigan

Number of Americans Employed by Japanese Automakers and Dealers in the U.S. During 2011

Japanese-Brand Vehicle Makers' Manufacturing Employees	53,693
Japanese-Brand Vehicle Makers' R&D and Design Employees	4,013
Japanese-Brand Vehicle Dealers' Employees	315,583
Japanese-Brand Vehicle Distributors' Employees	14,967
Total Employees	388,256

Map Key

- Vehicle Manufacturing Plant
- Engine Manufacturing Plant
- Parts Manufacturing Plant
- R&D Center
- Design Center

Please see pages 5, 6, and 7 for more details on these facilities.

Source: Japanese Automakers Note: There are 6,578 dealer franchises selling Japanese-brand vehicles.

Japanese Automakers' Production, Employment, and Investment In the U.S.

Name of Manufacturer	Name of Company	Location	Products	Units Produced in 2011	Production Capacity	Employees	Total Investment (\$ million)
Subaru	Subaru of Indiana Automotive, Inc.	Lafayette, IN	Legacy, Outback & Tribeca	240,866	310,000	3,620	1,212
			Toyota: Camry				
Isuzu	DMAX, Ltd.	Moraine, OH (Joint Venture:GM)	Diesel Engines	78,483	200,000	499	481
Honda	Honda of America Manufacturing, Inc.	Marysville, East Liberty & Anna, OH	Accord, Accord Crosstour, CR-V, Element, Acura TL & Acura RDX	476,758	680,000	10,200	7,000
			Engines	673,395	1,180,000		
	Honda Transmission Manufacturing of America, Inc.	Russells Point, OH	Automatic Transmissions	599,821	822,220	1,050	514
	Honda Manufacturing of Alabama, LLC	Lincoln, AL	Odyssey, Pilot & Ridgeline	262,125	300,000	4,100	1,700
			Engines	262,125	300,000		
	Honda Precision Parts of Georgia, LLC	Tallapoosa, GA	Automatic Transmissions	281,682	375,000	525	152
	Honda Manufacturing of Indiana, LLC	Greensburg, IN	Civic	84,767	200,000	2,000	550
Mazda	Auto Alliance International, Inc.	Flat Rock, MI (Joint Venture: Ford)	MAZDA6 Ford: Mustang	39,398 ¹	240,000	1,857	1,900
Mitsubishi	Mitsubishi Motors North America, Inc.	Normal, IL	Eclipse, Galant, Eclipse Spyder & Endeavor	37,120	110,000	1,287	1,689
Nissan	Nissan North America, Inc. (Smyrna & Decherd)	Smyrna & Decherd, TN	Altima, Altima Hybrid, Altima Coupe, Frontier, Xterra, Maxima & Pathfinder	333,426	550,000	4,200	3,183
			Engines	580,866	950,000		
	Nissan North America, Inc. (Canton)	Canton, MS	Altima, Titan, Armada & NV Commercial Vehicle	229,376	400,000	3,300	2,060

Data for this chart is continued at the top of page 6, with combined totals at the bottom.

Name of Manufacturer	Name of Company	Location	Products	Units Produced in 2011	Production Capacity	Employees	Total Investment (\$ million)
Toyota	TABC, Inc. (TABC)	Long Beach, CA	Catalytic Converters	728,452	2,100,000	474	270
			Steering Columns	115,635	210,000		
			Substrates	136,519	n/a		
			Stamping Parts	8,725,370	24,000,000		
			Sub-assemblies	2,836,544	4,600,000		
	Toyota Motor Manufacturing Kentucky, Inc. (TMMK)	Georgetown, KY	Camry, Camry Hybrid, Avalon & Venza	315,239	500,000	7,581	5,966
			Engines	415,487	500,000		
	Bodine Aluminum, Inc. (BODINE)	St. Louis & Troy, MO Jackson, TN	Cylinder Heads	1,590,668	n/a	1,011	595
			Engine Brackets	364,368	n/a		
			Cylinder Blocks	1,100,632	n/a		
			Transmission Cases & Housings	269,112	n/a		
	Toyota Motor Mfg., West Virginia, Inc. (TMMWV)	Buffalo, WV	Engines	494,257	620,000	1,069	1,037
			Transmissions	259,497	270,000		
	Toyota Motor Mfg., Indiana, Inc. (TMMI)	Princeton, IN	Sequoia, Sienna & Highlander	247,818	350,000	4,780	3,679
Toyota Motor Mfg., Alabama, Inc. (TMMAL)	Huntsville, AL	Engines	231,722	506,000	1,035	576	
Toyota Motor Mfg., Texas, Inc. (TMMTX)	San Antonio, TX	Tundra & Tacoma	149,017	200,000	2,866	2,166	
Toyota Motor Mfg., Mississippi, Inc. (TMMMS)	Blue Springs, MS	Corolla	1,968*	120,000	1,522	170	
Hino	Hino Motors Mfg., U.S.A., Inc. (California)	Ontario, CA	Vehicle Components for Toyota Vehicles	115,374	180,000	189	57
	Hino Motors Mfg., U.S.A., Inc. (Arkansas)	Marion, AR	Differential, Rear Axle & Suspension-Related Parts for Toyota Vehicles	104,350	275,000	327	222
	Hino Motors Mfg., U.S.A., Inc. (West Virginia)	Williamstown, WV	Class 6-7 Commercial Vehicles	4,835	10,000	201	30
Total	Vehicles 2011			2,422,713	3,970,000	53,693	35,209
	Engines 2011			2,736,335	4,256,000		

Source: Japanese Automakers; all data as of December 2011 Note: ¹ Units produced for Mazda only * Production started in October 2011

R&D and Design Centers Meet American Consumers' Requirements

Given the vast differences between Japanese and American vehicle markets, many of the products that JAMA members sell in the U.S. are designed and built in America. JAMA members' R&D centers are responsible for tracking consumer trends and developing products that satisfy American tastes and needs.

Name of Company	Headquarters, Division Offices	Current Functions
Hino Motors Manufacturing, U.S.A., Inc.	Farmington Hills, MI; Williamstown, WV	1, 5, 8
Honda R&D Americas, Inc.	Torrance, CA; Raymond & East Liberty, OH; Detroit, MI; Denver, CO; Cantil, CA	1, 2, 3, 4, 5, 6, 7
Isuzu Manufacturing Services of America, Inc.	Detroit, MI; Los Angeles, CA	2, 3, 4
Mazda North American Operations, Inc.	Irvine, CA; Flat Rock, MI	1, 2, 3, 4, 5, 6, 7
Mitsubishi Motors R&D of America, Inc.	Ann Arbor, MI; Normal, IL; Washington, DC; Cypress, CA	1, 2, 3, 8
Nissan Technical Center North America, Inc.	Farmington Hills, MI; Sacramento, CA; Canton, MS; Smyrna, TN	1, 2, 3, 5, 6, 7
Nissan Design America, Inc.	San Diego, CA	4
Nissan Technical Center North America, Inc. Arizona Test Center	Stanfield, AZ	3
Subaru Research and Development, Inc.	Cypress, CA; Lafayette, IN; Ann Arbor, MI	1, 2, 3, 4, 6, 8
Toyota Technical Center	Ann Arbor, MI; Plymouth, MI; Gardena, CA; Wittmann, AZ; Sacramento, CA; Saline, MI; Livonia, MI	1, 2, 3, 4, 5, 6, 7
Calty Design Research, Inc. (Toyota)	Newport Beach, CA; Ann Arbor, MI	4

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

Source: Japanese Automakers

68% of Japanese-Brand Vehicles Sold in the U.S. Are Built in North America

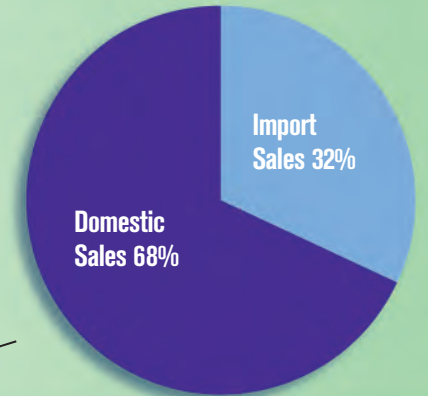
Japanese automobile companies currently build 68% of the vehicles they sell in the U.S. within North America (U.S., Canada, and Mexico).

Japanese-Brand Sales in the U.S. (Units)

Source: Ward's Automotive Reports

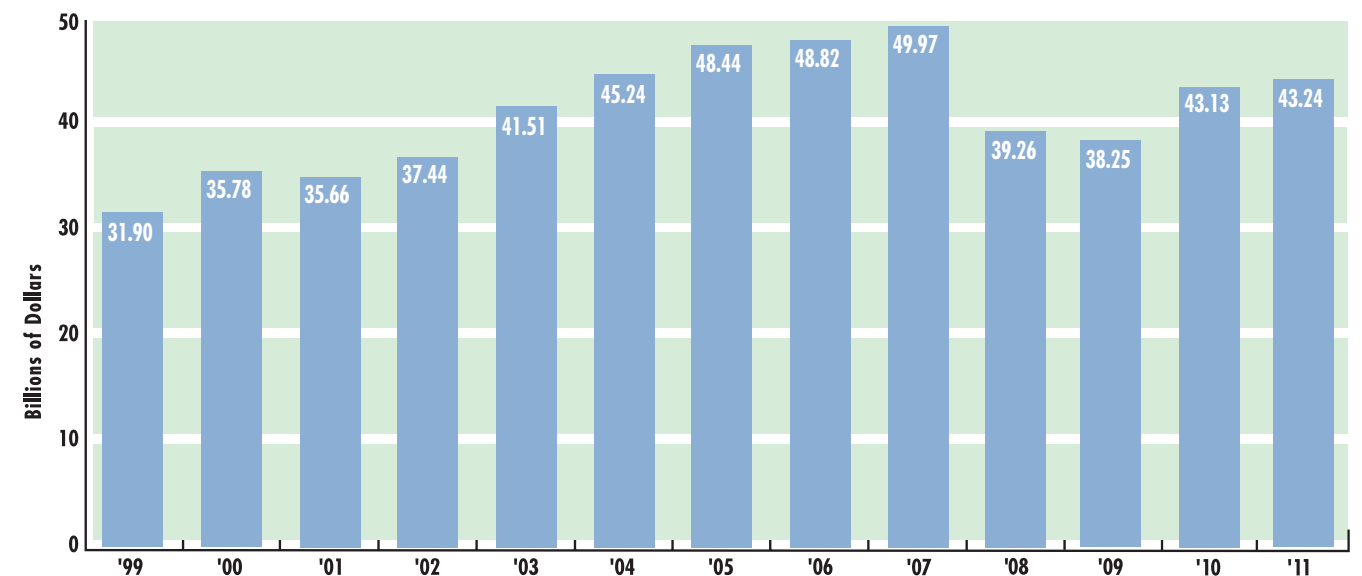
Year	Total Sales	Domestically Built	Imported	% Domestic
2006	5,773,943	3,627,634	2,146,309	63%
2007	5,966,527	3,743,624	2,222,903	63%
2008	5,238,985	3,240,634	1,998,351	62%
2009	4,209,768	2,764,228	1,445,540	66%
2010	4,477,398	3,066,401	1,410,997	68%
2011	4,459,283	3,025,174	1,434,109	68%

Note: Industry statistical sources record vehicles built in the North American Free Trade Agreement (NAFTA) region as domestic U.S. sales. Historical data is available at www.jama.org/industry_trends.html.



Purchases of U.S. Auto Parts Reflect Growth, Recession, and Recovery

In the early years, the purchases of U.S. auto parts by Japanese automakers grew steadily along with the growth of the U.S. economy and their expansion of production in the U.S., peaking at \$49.97 billion in Japan fiscal year 2007. Recession took its toll in 2008 and 2009, but parts purchases recovered somewhat in 2010 and 2011, reaching \$43.24 billion.



Source: Japan Automobile Manufacturers Association, Inc. Note: Data includes purchases of U.S. auto parts by JAMA members for vehicles built in both the U.S. and Japan.

Exports Contribute to the U.S. Economy

Japanese auto companies export cars from their U.S. plants, in addition to meeting U.S. consumer demand. In 2011, Japanese manufacturers' affiliates in the U.S. exported 259,908 American-built cars and trucks to countries around the world, including Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Kuwait, Mexico, Nigeria, Oman, Panama, Peru, Russia, Saudi Arabia, South Korea, and UAE. These exports constituted 16.5% of total new vehicle shipments from the U.S.

U.S. Exports from Japanese Auto Plants in the U.S.

	2011
Car Exports from Japanese Plants in the U.S.	140,596
Truck Exports from Japanese Plants in the U.S.	119,312
Car & Truck Exports from Japanese Plants in the U.S.	259,908
U.S. Car and Truck Exports	1,575,003
Percentage of U.S. Car and Truck Exports from Japanese Plants in the U.S.	16.5%

Source: Japanese Automakers and U.S. International Trade Commission Data Web Note: All exports include exports to Canada and Mexico.

JAMA Members Export These U.S.-Made Cars and Trucks

Toyota

Main Models:

Avalon
Camry SE & XLE
Corolla
Highlander
Sequoia
Sienna
Tacoma
Tundra
Venza



Tundra

Nissan

Main Models:

Altima
Frontier
Maxima
Pathfinder
X-Terra



Pathfinder

Honda

Main Models:

Accord
CR-V
Civic
Odyssey
Pilot



Accord

Subaru

Main Models:

Legacy
Outback
Tribeca



Legacy

Japanese Automakers' Positive Labor Practices in America

Japanese automakers in the U.S. have a well-deserved reputation for putting their employees first. Here is a snapshot of their positive labor practices.

Sharing Production Know-How

Toyota is considered the world leader in continuous improvement or "Kaizen." Since the early 1990s, the Kentucky-based **Toyota Production System Support Center (TSSC)** has shared the company's techniques with North American industries and organizations. In 2011, TSSC broadened its mission to support non-profit groups. It announced it would share its considerable expertise with the St. Bernard Project, a non-profit group dedicated to rebuilding homes devastated by Hurricane Katrina.



Toyota's continuous improvement techniques helped the St. Bernard Project streamline home rebuilding efforts in Louisiana.

Improving Manufacturing Skills in Arkansas

Hino in Marion, Arkansas, understands the value of professional development. In 2010, the company implemented the Manufacturing Skill Certification System to help its shop floor employees improve their manufacturing skills. Since its implementation, the Arkansas Economic Development Commission has recognized the program's effectiveness.



Hino employees participate in the company's acclaimed skill certification program.

Training Dealership Technicians

Nissan North America opened the New Jersey Service Training Center in June 2012 to train technicians working for Nissan and Infiniti dealerships in the Northeast. The 31,000-square-foot facility in Somerset, New Jersey, includes five training classrooms and a 28-bay workshop as well as a classroom for technical and sales training. The new facility is one of 11 such centers in the U.S. Additional centers are scheduled to open in late 2012 in Washington, D.C. and Chicago.



Nissan North America has just opened a new service-training center in New Jersey.

The ACME Troubleshooters

A team at **Honda's Anna Engine Plant** in Marysville, Ohio, had a problem. The 40 metal carriers used to transfer connecting rods, which connect the piston to the crankshaft, each contained 46 different pieces, making them complicated and difficult to repair when they broke. Five employees — the self-named ACME Troubleshooters — redesigned the device, reducing the number of parts to just 15. The device is now less expensive and time-consuming to repair. For their efforts, the plant recognized the ACME Troubleshooters as its Gold Corporate Champions.



Dean Carpenter (left) and Eric Beaty (right) were part of a five-member team recognized as Gold Corporate Champions.

Community Involvement Improves Americans' Quality of Life

Japanese automakers are known for high-quality vehicles. They also are becoming known in America for their dedication to community and service.

Environmental Conservation

Employees of **Hino's West Virginia plant** were among the hundreds who tackled a dirty job in June 2012 — cleaning the Ohio River and other waterways as part of the community-sponsored 2012 Ohio River Sweep. "The community gives a lot to us and this is one way we can give back," explained Hino General Manager Stephen Stalnak.

Support of Disabled Americans

A public park in Lafayette, Indiana, is now equipped with playground equipment specifically designed for children with physical disabilities — thanks in large part to employees of **Subaru of Indiana Automotive (SIA)**. Employees who participated in the company's second annual SIA Community Walk/Run in 2011 raised more than \$70,000 to purchase and install the equipment.

The **Mazda Foundation**, meanwhile, supported the Challenged Athletes Foundation, which was established in 1997 to provide sports opportunities for all people with disabilities. In 2011, Mazda provided money for adaptive equipment, coaching, training, and other expenses needed by veterans who had suffered permanent physical injuries during their military service.

Charitable Giving in Ohio

By late December 2011, **Honda of America Manufacturing, Inc.** had contributed more than \$75 million to charitable organizations in Ohio. Since 1979, Honda's charitable giving has supported hospitals, community centers, theaters, food banks, after-school programs, nature preserves, and parks. Employees also have volunteered their time supporting such organizations as Rebuilding Together Central Ohio, an organization dedicated to repairing homes of the needy.

Safety Promotion

Responding to the disproportionate rates of African American and Hispanic children dying in motor vehicle-related crashes, **Toyota** and the Cincinnati Children's Hospital Medical Center announced this year that they were expanding their six-week groundbreaking safety education program — Buckle Up for Life. The program plans to expand into Houston, Las Vegas, Philadelphia, and Orange County, California.



Subaru, Community Walk/Run 2011



Mazda Foundation, Challenged Athletes Foundation



Honda, Rebuilding Together Central Ohio

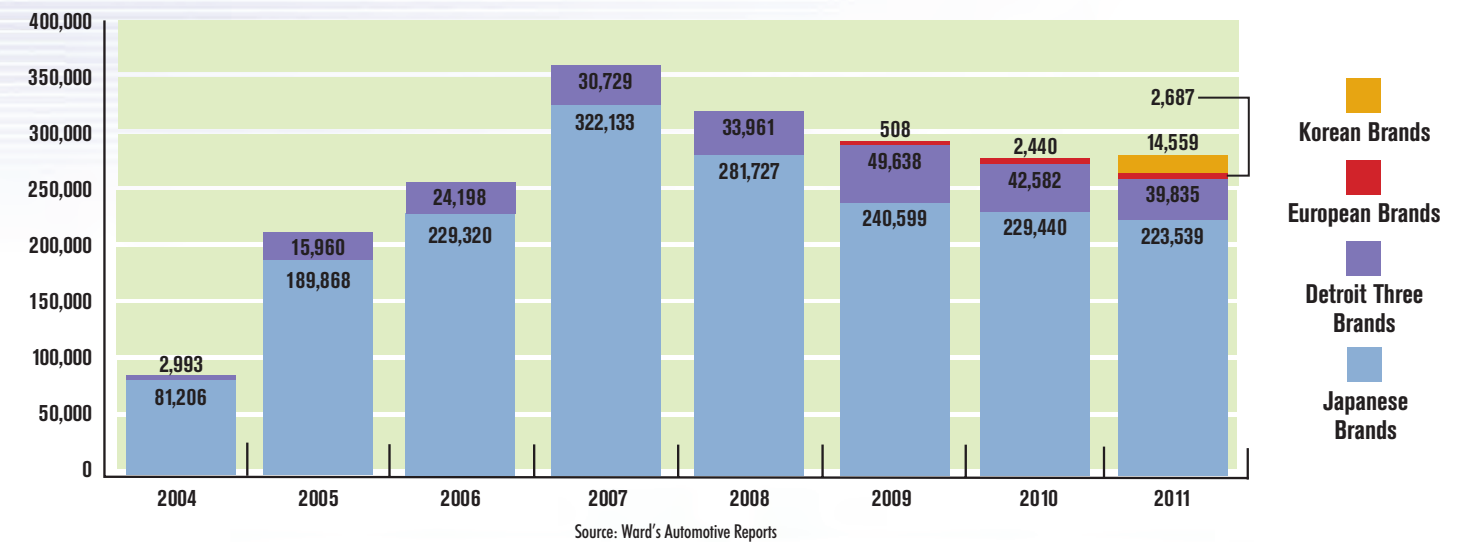


Toyota, Buckle Up for Life

Japanese Brands Make Up 80% of Alternative-Powered Car Sales in the U.S.

While others have entered the alternative-powered vehicle market in the last few years, Japanese automakers still provide the vast majority of hybrid, electric, and fuel cell electric vehicles on the road in the U.S. In 2011, Americans bought 80% of their alternative-powered vehicles from JAMA members.

U.S. Sales of Alternative Power Source Vehicles



Nissan Leaf



Honda Civic Hybrid



Toyota Camry Hybrid



Toyota Prius Hybrid



Cars and Trucks on the Road: New Environmental and Energy-Efficient Technologies

JAMA members pioneered many of the environmental and energy-efficient technologies that have become ubiquitous in the automotive marketplace today. Their dedication to preserving the environment, while offering world-class products that customers want, continues, as evidenced by the growing number of eco-friendly vehicles available in America. The vast majority of these cars and trucks on American roads are produced by Japanese automakers, as shown in a chart on page 12.

Toyota RAV4 EV

Toyota unveiled the all-new RAV4 EV, which equals or exceeds the driving performance and cargo capacity of the gasoline-powered RAV4 V6, at the 26th annual Electric Vehicle Symposium in Los Angeles in May 2012. The all-electric SUV has an expected driving range rating of about 100 miles and charging time of about six hours on a 240V/40A charger. Produced under a unique collaboration with Tesla Motors, the RAV4 EV comes equipped with a Tesla-designed and -produced battery and electric powertrain.

Mitsubishi Fuso Canter Eco Hybrid

Mitsubishi Fuso, one of Asia's leading truck manufacturers, in May 2012 launched the all-new Canter Eco Hybrid light-duty truck in Japan. The new truck incorporates a combination DUONIC® dual-clutch transmission and hybrid motor — the world's first. The new technology, an innovation of Daimler Trucks Global Hybrid Center in Kawasaki, Japan, extends the company's commitment to incorporating advanced technology and becoming an even greener company, said company president Albert Kirchmann. "The second generation, all-new innovative truck is a compelling sign of commitment by Fuso and Daimler trucks in leading the industry in game-changing innovation," he said. This launch is expanding outside Japan and is under study in the U.S. market.

Mitsubishi i

Mitsubishi in early 2012 delivered six new Mitsubishi i electric vehicles (EVs) to the town of Normal, Illinois — the hometown of the company's U.S. vehicle manufacturing plant. "Putting these six all-electric cars into our fleet is the next major step in the EVTown Initiative, which has put Normal-Bloomington in the national spotlight as a forward-thinking community," said town Mayor Chris Koos. "The town of Normal is eager to get these cars into service and to show our community how well EVs work for a variety of tasks, even in our cold January weather." The delivery is the first to a customer outside the states of Hawaii, California, Oregon, and Washington.

Mazda CX-5

The all-new Mazda CX-5 is the first model to adopt the company's breakthrough SKYACTIV technology, which includes engines, transmissions, bodies, and chassis that deliver a significantly improved driving experience and fuel economy. The SKYACTIV-G 2.0L model, equipped with the highly efficient direct-injection gasoline engine, also includes for the first time Mazda's 4-2-1 exhaust system. The CX-5 crossover has the best highway fuel economy of any SUV in America — including hybrids.

Hino 195 Hybrid

Hino has introduced its new diesel-electric hybrid truck that offers 30% better fuel economy than a comparable diesel model. Designed from the ground up for the U.S. market, the new truck is a direct beneficiary of the company's six generations of hybrid technology. More than 10,000 vehicles equipped with this technology are on the road around the globe.

Honda Fit EV

Honda's all-new 2013 Honda Fit EV is now available for a three-year lease in California and Oregon. The latest in the company's diverse and growing line-up of alternative-fuel vehicles, the Fit EV received the highest fuel-efficiency rating ever given by the U.S. Environmental Protection Agency, with an adjusted combined mile-per-gallon equivalency rating of 118 MPGe. Just a few weeks after making the announcement, Honda reported that it had delivered the first Honda Fit EV to a Southern California couple, who plan to use the vehicle as a commuter car. Honda plans to expand into six East Coast markets in early 2013.

Nissan Infiniti M Hybrid

The sole hybrid powerplant to be honored by *WardsAuto World* magazine and *WardsAuto.com* in their 2012 "10 Best Engines" list was the Infiniti M Hybrid's 3.5-liter V6 with Infiniti Direct Response Hybrid system. Offering 360 horsepower and 32 miles-per-gallon in highway driving, the powerplant uses an advanced one-motor, two-clutch design and high-speed motor control enabled by a powerful lithium-ion battery. Together, the technology achieves seamless transitions between the gasoline-combustion and electric motor. Aside from its advanced powerplant, the hybrid delivers uncompromised interior space and large trunk space.



Toyota RAV4 EV



Mitsubishi Fuso Canter Eco Hybrid



Mitsubishi i



Mazda CX-5



Hino 195 Hybrid



Honda Fit EV



Nissan Infiniti M Hybrid