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Jeep, Chevy and GMC Vehicles Made 'Most American' List

For the second consecutive year, Jeep Cherokee is ranked first on Cars.com's annual American-Made Index (AMI).

"The Jeep Cherokee tops Cars.com's American-Made Index for the second year in a row, taking the number-one position, thanks to high scores across the five major factors analyzed in the index," said Kelsey Mays, senior consumer affairs editor, Cars.com.

The Jeep Cherokee, a small SUV from Fiat Chrysler Automobiles, tops the American-Made Index for 2019. Built with U.S.sourced engines and transmissions in Belvidere, Ill., the Cherokee is the index's top vehicle for

the second year in a row. It also gives FCA the top slot for three years running, as the Jeep Wrangler topped the index in 2017, Mays said.

Now in the second year of its revised methodology, the AMI considers five major factors to zero in on the economic impact of a given model: assembly location, domestic-parts content as determined by the American Automobile Labeling Act, engine sourcing, transmission sourcing and factory jobs provided by each automaker's U.S. plants.

"As we approach the Fourth of July holiday, we are especially pleased to celebrate Cherokee's place as the most American vehicle on Cars.com's American-Made Index for the second consecutive year," said Jim Morrison, head of Jeep Brand - North America. "We salute the dedicated employees who build the Cherokee, the most capable midsize SUV on the planet, as well as all the loyal Jeep owners who drive it."

The Chevrolet Corvette made the fifth spot, while the Chevrolet Colorado was eighth on the top 10 list, and the GMC Canyon finished in the ninth spot.

Cars.com's American-Made Index shows that an automaker's home country doesn't necessarily dictate the impact a specific model can have on the U.S. econ-



The 2019 Corvette ZR-1 was named fifth "most American" car for 2019.

omy and labor force, Mays said. To build the American-Made Index, Cars.com analyzes five factors: where a car is assembled,

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Tech Center Gets New 3D Printing Lab

GM employees – including contract employees and suppliers are now able to take advantage of a new joint 3D printing innovation lab and incubator space colocated inside the company's Vehicle Engineering Center (VEC) on the campus of the Global Technical Center (GTC) in Warren, said General Motors spokeswoman Jasmin Saleh.

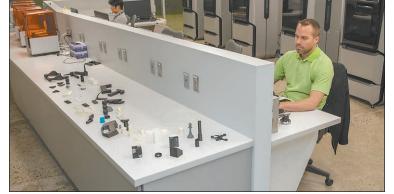
GM's newly constructed Additive Innovation Lab at iHub offers more than 5,500 square-feet of functional space to foster education and innovation through hands-on learning and problemsolving.

"The new Additive Innovation Lab at iHub represents an opportunity to learn and innovate," said Ken Kelzer, vice president of Global Hardware Components and Subsystems. "This employee-led center is really a great opportunity to transform how we approach our jobs now and in the future. I encourage everyone to take advantage of this new center of expertise.'

The Additive Learning lab houses several 3D printers that utilize a variety of materials and technologies. The lab serves as GM's center of 3D printing education and is open to anyone who wants to learn about and fully leverage the advantages of the latest 3D printing technology, Kelzer said.

The lab expands GM's 3D printing expertise and capabilities. GM's GTC is also home to 3D

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Tech Center employees are using GM's new innovation lab.

Auto Analyst Predicts Challenges for Industry

by Jim Stickford

The next few years will be challenging ones for the auto industry as sales decline during a period of heavy investment in new technology development.

That was the message given by Mark Wakefield, global co-leader, Automotive and Industrial Practice at AlixPartners, a New Yorkbased consulting firm known for its work in turnaround space.

Wakefield spoke to a gathering of the Automotive Press Association meeting at the Detroit Athletic Club on June 25. He talked about the immediate future of the auto industry and the challenges it faces.

He said vehicle sales in China should see about a three million vehicle drop in 2019, with total sales amounting to roughly 24.8 million. Then sales should go up by about 3 percent a year. By 2026, China sales should be about 30.7 million.

But China has an overcapacity problem, Wakefield said. GM, for example, is using only about 84 percent of its China capacity, while Ford is using only about 24 percent.

"China now has been so-so in its capacity use," Wakefield said. "It's now moving to a bad spot. With that in mind, India will be the main driver of automotive growth in South Asia. We expect sales of 3.7 million vehicles in 2019, 3.9 million in 2020, and sales reaching a level of 6.2 million by 2026.

Wakefield said that sales in Europe look to be flat for the next few years. The story there is how regulation about powertrains and CO2 emissions will be driving development and cost.

"Europeans want to reduce CO2 emissions, and right now there is a big gap between the way things are now and future targets," Wakefield said. "As for North America, we are pretty much following the traditional cyclical sales trends. In 2018, we

sold 17.3 million vehicles, which was higher than expected."

There were a couple of reasons for that, Wakefield said. First, used vehicles kept their residual prices up, which was a surprise. Many thought people might switch to used, but with used prices relatively high, many buyers just decided to go new.

Second, with the tax cuts, a lot of companies refleeted, and bought new vehicles. That won't last forever.

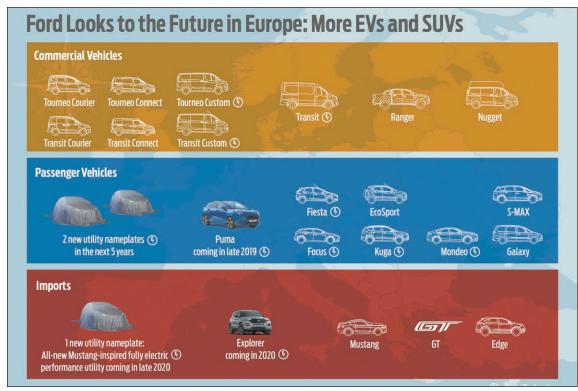
"The OEMs have done of good job of managing the shift in vehicle demand," Wakefield said. "They have pushed the fleet lines somewhat. The peak for retail vehicle



Mark Wakefield

sales was 2015. Right now, OEMs are challenged as consumer tastes move from sedans to SUVs and

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Ford's new plan for Europe calls for streamlining its product portfolio, and upping EV and SUV production.

Ford Adapting to Changing Times with Europe Plan

Change in the automotive in- vest and grow our leading comdustry is a global phenomenon, mercial vehicle business and which is why Ford is launching a new business model and fresh vehicle lineup as part of the most comprehensive redesign in the history of its business in Europe.

The company also is on track to significantly improve its financial results in Europe this year, paving the way to sustainable profitability and its longerterm goal of delivering a 6 percent EBIT margin, said Ford spokesman John Gardiner.

"Ford will be a more targeted business in Europe, consistent with the company's global redesign, generating higher returns through our focus on customer needs and a lean structure," said Stuart Rowley, president, Ford of Europe. "Implementing our new strategy quickly enables us to inprovide customers with more electrified vehicles. SUVs. exciting performance derivatives and iconic imported models."

The new European operating model and resulting organization are effective July 1.

Three new business groups -Commercial Vehicles (CVs), Passenger Vehicles (PVs) and Imports - are established to facilitate fast decision-making centered on customer needs, Rowlev said. Each has a dedicated management organization including leaders responsible for marketing, manufacturing and product development.

The Commercial Vehicles group will be led by general man-

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31201 Chicago Road South Warren, Michigan 48093

586-939-6800

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Warren Library **Presentation** Gets Salty

Talk about taking new knowledge gained by attending a special lecture sponsored by the Warren Public Library with a grain of salt.

"Approximately 1160 feet below the streets of Detroit lies a massive salt bed, created some 400 million years ago and discovered in 1895," said Warren librarian Amy Moss.

That history will be the subject of a talk given by George L. Davis, Public Affairs and Public Safety manager at Detroit Salt Company talk at the Miller Branch Library on Thursday, July 18, at 6 p.m.

"Mr. Davis will be on hand to discuss the historic geologic and industrial wonder that is the Detroit Salt Mine, operating for miles under Detroit," Moss said. The talk will present the mine's history, its basic operations, and its role as an economic hub for the greater Detroit region. It promises to be interesting and present interested parties with a look at Detroit that many people don't know a lot about.'

Registration is required; please register online at warrenlibrary.net or call the branch at 586-751-5377.

This event will be held in Conference Room "A" (Room 203) of the Warren Community Center.

The Miller Branch Library is located at 5460 Arden in the Warren Community Center (between 14 Mile and Chicago, west of Mound). For more information, call (586) 751-5377.

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Jeep, Chevy and GMC Vehicles Make 'Most American' List

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domestic-parts content, where its engines and transmissions come from, and how many U.S. factory workers its parent automaker directly employs relative to vehicle sales.

To discern a car's domesticparts content, Cars.com uses U.S. and Canadian parts content from the American Automobile Labeling Act, a law that requires automakers to report the percentage of such content on or near the window sticker of every new passenger vehicle sold.

The act groups the U.S. and Canada into the same pool, which isn't ideal for our purposes, so the American-Made Index also analyzes the countries of origin for each model's engines and transmissions, Mays said. (The AALA requires automakers to report this, too.) This ensures that two of the most expensive and labor-intensive components are from the U.S., not Canada or elsewhere.

The AALA doesn't report costs associated with final assembly, distribution or other non-parts items. That means it misses a significant chunk of the labor costs that go into a given model, Mays said. To account for such costs, the Index also considers each OEM's U.S. factory employment relative to its sales footprint.



Cars.com named the Cherokee the 'most American' vehicle for 2019.

Auto Analyst Sees More Challenges Ahead for Industry

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trucks. It will be a struggle for automakers who find themselves on the wrong side of that shift in preference.'

Wakefield said that he's never seen a period when Gross Domestic Product was down and car sales were up. He has seen a couple of instances when GDP was up and car sales went down, but never the opposite.

So as the economy slows down, car sales should reflect that fact. He expects sales of about 15.1 million in 2021, down from about 16.9 million in 2020. But sales should increase to about 15.9 million in 2023 and 16.5 million in 2024.

But the real things that people should be looking at is Return On Investment (ROI) and profit margins, Wakefield said.

"We are seeing ROI and profit margins starting to drop," Wakefield said. "Return on capital investment has dropped to near-recession levels.

"If you look at global OEMs, this can be attributed to declining sales happening at a time when they are having to switch plants over to SUV production and invest in new EV and AV technology.

"Companies are adding a lot more to structural costs because of these factors.'

Wakefield said he expects to see spending on AV technology to continue to grow because no company wants to be left out.

The push by the Chinese gov-

ernment to have companies develop EV technology could give China a real advantage in the future as people come to accept EV vehicles. Wakefield expects China and Europe to lead the way in EV adoption.

"We're seeing a lot of investment in EV tech, but the sales are not there yet," Wakefield said. "This presents OEMs in North America with a real challenge.'

When asked about more partnerships within the auto industry, Wakefield said that he expects to see more.

They are up for a simple reason. Developing new technology is expensive.

"I think Sergio Marchionne of FCA got it right," Wakefield said. "He said people won't care about a new powertrain system as long as it works. So we won't need

each OEM to develop its own EV or AV system. I could see four or five powertrains spread across many OEMs because they were developed through partnerships.

"Partnerships within the industry between OEMs make a ton of sense. Especially between companies that are 50/50 partners. Things don't work as well when one company is much stronger than another."

When asked about the upcoming UAW negotiations, Wakefield declined to speculate, but did say that the OEMs now have strong numbers that they can show to the union about ROI and how it's declining.

When asked about the decline in sedan sales, Wakefield said the switch to SUVs/Crossovers (CUVs) is not just a fad. It's a generational shift that isn't going away. He said

that CUVs offer more room and gas mileage has improved so much that people just like them to sedans.

Some buyers will always prefer sedans, he said, but they will face a much more limited range of sedan options in the future, and he doesn't expect consumer preferences to change.

"We expect sedans to make up only about 22 percent of the total automotive market in North America in the year 2026," Wakefield

"Any Millennial interest in purchasing a sedan is mostly driven by affordability. But people really like having more space and having a higher H point (height of seats). They like the driver seat being higher in a CUV than the H point in a sedan and that's not going to change."

Ford Unveils New Plan For Europe Division

CONTINUED FROM PAGE 1

ager Hans Schep and based at the company's CV center of excellence in Dunton, U.K., which is being strengthened through facility improvements and investments to enhance technical skills.

Ford intends to grow its leadership as the top-selling CV brand in Europe, including leading the pickup segment, and to double its CV profitability in Europe in the next five years, Rowley said. This growth will be supported by

its strategic alliance with Volkswagen, its Ford Otosan joint venture in Turkey and a restructured Ford Sollers joint venture in Russia.

The Passenger Vehicles group, under general manager Roelant de Waard based in Cologne, Germany, will lead a future portfolio of European-built cars and SUVs.

Cross-functional project teams are dedicated to running each vehicle nameplate, empowered to adjust design and manufacturing to focus on customer needs. European passenger vehicle development, including battery electric vehicles, will be centered in Cologne-Merkenich, Gardiner

The Imports group will comprise a niche portfolio of iconic passenger vehicles including Mustang, Explorer and an all-new Mustang-inspired fully electric performance utility coming in late 2020. Ford expects to more than triple passenger vehicle imports into Europe annually by

Ford is freshening and expanding its vehicle lineup in Europe, introducing at least three new nameplates in the next five years as it continues to grow its utility vehicle portfolio, Gardiner said. The new nameplates are in addition to the new Kuga, Puma and Explorer Plug-In Hybrid coming by early 2020.

Fuel economy improvements and CO2 reductions are being realized through improvements in conventional powertrains, country-specific vehicle portfolio management and a broad range of new hybrid and full electric propulsion choices.

Every new Ford passenger vehicle nameplate will include an electrified option, delivering one of the most comprehensive lineups of electrified options for European customers, Gardiner said. A future family of battery electric vehicles will be assembled in Europe.

"Our future is rooted in electrification," said Rowley. "We are electrifying across our portfolio, providing all of our customers with more accessible vehicle options that are fun to drive, have improved fuel economy and are better for our environment."

The foundation of Ford's new operating model in Europe is a broad-based efficiency improvement program designed to support the new business groups.

Manufacturing efficiency is being improved through the previously announced proposed or confirmed closure or sale of six assembly and component manufacturing plants by the end of next year.



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JULY 1. 2019 COVERS THE TECH CENTER AND THE IMMEDIATE AREA



GM has continued in its support of EV technology with cars like the Bolt.

GM's Latest Sustainability Report Marks Its Progress

When GM announced its vision for the future a decade ago, it was serious, and the automaker has pursued its goals over the years.

The company has marked its progress in meeting its goals with the recently released GM ninth annual sustainability report, "Transformation Progress."

The paper is meant to update employees, investors, policymakers, advocacy groups and customers on the aggressive moves the company made in 2018 to achieve its vision of a world with zero crashes, zero emissions and zero congestion, said GM spokeswoman Jennifer Korail. The report also extensively covers GM's drive to build "a worldclass, inclusive and customer-focused culture with strong corporate governance and transparen-

"For years, we have said that the auto industry is experiencing more change today than in the past 50 years. That pace of change is only accelerating," said GM Chairman and CEO Mary Barra. "With the right team, technology, resources and scale to achieve our vision, I believe the only thing that can stop us is not acting quickly enough. Disruption creates uncertainty, but it also creates vast possibilities that will lead to a better world."

Some of the results from the 2018 report:

· GM reduced its manufacturing carbon intensity since 2010three years ahead of its goal. GM set a new goal to reduce emissions by 31 percent by 2030 compared with a 2010 baseline, consistent with the level of decarbonization required by sciencebased methodology.

- Renewable energy powers 20 percent of GM's electricity needs today and will power 100 percent by 2050.
- Cars being tested by Cruise, GM's self-driving, ride-hailing subsidiary, drove 3.5 times more miles in 2018 than in 2017. That underscores the tremendous progress the company is making toward the commercial introduction of self-driving cars -a key part of its zero-crashes vision. Cruise secured commitments for \$5 billion of external investment, demonstrating the high level of confidence in its vision.
- Cadillac will be GM's lead brand for electrification technologies, and the company will double its engineering resources focused on EV and AV programs in the next two years.
- GM is the first automotive company to commit to the future of sourcing sustainable natural rubber for tires to mitigate deforestation and its effects on climate change.
- · Chevrolet debuted an industry-first Buckle to Drive feature in the 2020 Traverse to help young drivers develop safe driving habits by reminding them to buckle up every time they get behind the wheel.
- GM supported initiatives promoting STEM education, vehicle and road safety and community development via grant funding in 28 states, serving 1.4 million individuals.
- GM ranks 14th and industryhighest on the JUST 100, a ranking of companies whose business behaviors align with priorities of the American public in environment, social and ethical factors.
- GM ranks first worldwide on Equileap's 2018 Gender Equality in the Workplace.

Tech Center Gets New 3D Printing Lab

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printing facilities inside Manufacturing A and Research & Development. Several General Motors plants also utilize 3D printing. GM was the first automotive company to use 3D printing for product development 30 years ago, Saleh said.

The Additive Innovation Lab at iHub is also the new home to iHub, GM's employee incubator and consultancy to help empower product innovation as well as problem-solve with tangible solu-

Through GM proprietary inno-

vation methodology, product product prototype ideas, and ideas from employees are evolved from a simple original thought to a working prototype, Kelzer said.

Since launching in 2015, more than 15,000 employees have participated in various iHub programs, developed hundreds of generated multiple Saleh said.

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To familiarize employees with the new site and its capabilities, GM held an Open House on June 5. All who attended were encouraged to visit and learn about the new capabilities offered.

Warren City Offices Closed During Fourth of July

Warren's City Hall will be closed for business on Thursday, July 4.

City Hall will operate normal business hourse - 8:30 a.m. through 5 p.m. on Wednesday, July 3, and on Friday, July 5.

These are regular city offices. Emergency police and fire services may be contacted via regular means on Thursday, July 4. Call 586-574-4557 to learn more.





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Old Ford Assembly Plant Made New Again

It appears that everything old is new again.

Inside the Ford plant on Chicago's south side, it's difficult to recognize that it's the company's oldest continuously producing plant, said Joe Hinrichs, Ford's president of Automotive.

A nearly \$1 billion investment and 500 additional jobs have completely transformed this plant into a high-tech facility entrusted with building a new version of America's best-selling SUV over the last 29 years – the Ford Explorer.

Ford announced the \$1 billion investment in its Chicago Assembly and Stamping plants and 500 new jobs earlier this year. A strong Chicago workforce boosted with new technology in the Chicago Assembly Plant – is building Ford's new Explorer lineup, Police Interceptor Utility vehicles and new Lincoln Aviator.

The plant changeover took one month – a company record for an all-new vehicle build, said Ford spokeswoman Kelli Felker.

This reflects American ingenuity at its finest," said Hinrichs. "In the first five days of the transformation, the team moved the scrap metal equivalent to the weight of the Eiffel Tower from the plant, making room for new equipment.

'Knowing this plant is set in a city and trucks could not go in and out of the plant at all hours, the team got creative and rented a barge, put all of the scrap metal on it, floated it a mile up the river to a recycling center, then moved in more than 500 truckloads of new technology.

Ford replaced outdated machines with advanced manufacturing technology - including two 3D printers at the plant, Felker said. The Chicago team stripped the body shop down to the concrete floor and completely rebuilt it - adding 600 new ro-

The team updated the paint shop, too, and modified nearly every operator workstation in the final assembly area.

The plant now also features a collaborative robot with a camera that inspects electrical con-



Ford spent \$1 billion upgrading its Chicago Assembly Plant.

nections during the manufacturing process.

The new production line also uses several 3D printed tools and nearly 500 new error-proofing tools to help employees build these new SUVs with even higher quality, Felker said.

Ford also invested \$40 million for employee-centered improvements to make the plant a better place to work, including all-new LED lighting, cafeteria updates, new break areas and security upgrades in the parking lot.

And, the company added team break rooms on the plant floor, which is important to employees on the line who work on their feet all day. With 30-minute breaks, they used to spend 10 minutes walking to and from an area in which they could relax. Now they can take full advantage of their entire break period.

This plant is 95 years old but it's just like new," said Robert Washington, Chicago Assembly Plant employee. "I love to see the products we build out on the roads. It makes me very proud."

Ford assembles more vehicles in the U.S. than any other manufacturer, Hinrichs said. The company also employs more hourly workers than any other automaker. More than 80 percent of what Ford sells in the U.S. is assembled in the U.S.

Approximately 5,000 people work at Chicago Assembly Plant, including approximately 4,800 hourly employees, Felker said. About 1,200 people work at Chicago Stamping Plant, of which approximately 1,100 are hourly employees.

"Our UAW members in Chicago are very serious about building these vehicles with quality," said Rory Gamble, UAW-Ford vice president. "Ford's investment in the Chicago plants is important because it secures the jobs of our nearly 6,000 UAW members in the area, which is critical not only to their families but to the communities in which they live."

OEM Donates Vehicles to Local School

BLUE SPRINGS, Miss. (AP) -Toyota Mississippi has donated 10 new model Corollas to Itawamba Community College's automotive technology program to be used for hands-on training.

The company donated the 2020 model-year cars last week. In 2013, the school received seven cars.

The auto program's head, Brad Crowder, says basically students pull out the cars' engines and transmissions and put them back in.

Toyota's donated cars were originally used to provide onsite training for team members at Toyota's Blue Springs facility.



This summer promises a rockin' good time – just as last year seen here – at the Detroit riverfront.

Chevy's Rockin' on the Riverfront Returns

The 2019 Chevrolet Rockin' on the Riverfront Concert Series begins on Friday, July 12, at 7:30

The annual concert series will be held at the GM Plaza directly behind the Renaissance Center, along Detroit's River Walk area.

Convenient parking is available for \$10 per vehicle after 5 p.m. in the GM surface lot at the intersection of St. Antoine and Atwater, adjacent to the Renaissance Center.

Only credit cards will be ac-

• July 12 - The Marshall Tucker Band will perform. Known for "Heard It In a Love Song," "Fire On The Mountain," "Can't You See," and "Take The Highway.'

The Marshall Tucker Band earned seven gold and three platinum albums while they were on the Capricorn Records label.

• July 19 - This evening's fea ture group is the Mark Farn er's American Band.

Michigan rocker Mark Farner was the guitarist, lead singer and songwriter for Grand Funk Railroad.

The Flint Band dominated airwaves with songs like, "We're an American Band," "The Loco-Motion," "I'm Your Captain," and "Bad Time."

- July 26 Soul Asylum, the Grammy-winning band best known for "Runaway Train," "Black Gold," and "Misery," will perform.
- Aug. 2 The band Loverboy will be featured. The group, which has been playing to gether since 1978 is best known for the song, "Working for the Week-end.
- Aug. 9 Jon Anderson of the band Yes will perform. An-

derson is a Rock and Roll Hall of Fame inductee and will feature songs from his new album, "1,000 Hands.'

Anderson co-founded Yes in 1968 and co-wrote several of the band's hits, including, "I've Seen All Good People," "Roundabout," "Long Distance Runaround," "Awaken," and "The Gates of Delirium.

• Aug. 16 - Little River Band, known for hits such as "Reminiscing" and "Cool Change," will close out the summer concert season.

Opening acts for these bands be selected through will WCSX's Rockin' Wars contests, where local bands compete in a Battle of the Bands style competition.

To learn more about the concert series, go to blog.gmrencen.com/2019-chevy-ror.

TRAVELING SOUTH

See Where Voice of American Radio **Broadcasting Got its Start**

As summer travel season heats up, those going south along I-75 might enjoy taking a detour to visit the Voice of American Museum of Broadcasting.

The museum is located right off of I-75 in West Chester, Ohio. And the story behind how the museum ended up in Ohio near Cincinnati is very interesting, said its executive director, Jack Dominic.

"It all starts with an entrepreneur named Powel Crosley, Jr.," Dominic said. "He's been called the Henry Ford of radio. You see, in the old days, radios were expensive. A new one in the 1930s might cost \$100. That's a lot of money for the time.'

The reason for the expense was that radios had to be carefully calibrated to be able to receive relatively weak signals from nearby transmission towers, Dominic said. Building such a radio was expensive.

Crosley had the idea of building inexpensive radios costing around \$10 or so. These radios wouldn't be able to receive weak signals. Crosley's work-around was to build a transmission tower that blasted out a strong signal via WLW radio.

In 1934, Crosley put a 500-kilowatt transmitter on the air, making WLW the station with the world's most powerful radio transmitter for the next five years, Dominic said.

Crosley was a pioneer in many fields. He founded a region airline that flew routes between Cincinnati, Dayton, Ohio, and Detroit. This airline became a foundation of what would later become American Airlines.

"He even invented the electronic newspaper," Dominic said. "He had a machine called a 'reado' that would receive radio signals overnight and print a newspaper from those signals. It was an early fax machine. He published it for three years starting in 1939. But it was expensive compared with buying a daily copy of the Cincinnati Enquirer."

When World War II broke out, President Roosevelt wanted to find a way to get real news to parts of the world where that wasn't easy, Dominic said.

So he sent out a call to companies like GE, Westinghouse and RCA asking what they could do to build a transmitter that could



Powel Crosley Jr.

'Crosley was also there and said he was already doing something like that with his transmitter, so that's why the first Voice of America Transmitter was based in Cincinnati because that was where the engineers who knew how to do this were," Dominic said. "They used a shortwave transmitter that could reach Nazi-occupied Europe. He was so successful that Hitler himself told people that they should pay no attention to those 'Cincinnati liars.' The VOA transmitter was equally important during the Cold War era.'

Dominic said that the museum will be selling a special craft beer this summer called "Cincinnati Liar" in honor of the nickname given to Crosley by Hitler.

The Cincinnati transmitter covered Europe, South America and Africa, Dominic said.

Another transmitter in California covered the Pacific Rim coun-

But technology changed and improved. The transmitter was shut down in 1994 because VOA was using equipment such as satellites to broadcast its news.

So the old VOA facility was turned into the VOA Museum of Broadcasting, Dominic said. In addition to covering the VOA history, it has the largest collection of Crosley products in the world.

'Mr. Crosley did more than just build radios," Dominic said. "He made cars and owned the Cincinnati Reds. He was a maker of appliance and consumer products, as well as airplanes. He was a fascinating man.'

The museum is open to the public from 1 to 4 p.m. on Saturdays and Sundays, Dominic said. There is no admission charge.

Vehicle Age Highest Ever

DETROIT (AP) - The average age of cars and trucks in the U.S. has hit a record 11.8 years, as

The 2019 figures from data provider IHS Markit show that the rate of increase is slowing right now, but the average age of vehicles on the road is still expected to go over 12 years early in the next decade.

The average age of cars on the road today is up slightly - 0.1 years from 2018.

There is a reason for vehicles being older today. People are feeling much more comfortable keeping vehicles longer because they're built better than in the past, said IHS Markit Director of Global Automotive Aftermarket Mark Seng.

"The quality is higher, lasting longer, withstanding the weather," Seng said.

Plus, original owners are keeping their vehicles longer and maintaining them better because they're financing them for longer periods of time - up to six or even seven years in many cases, Seng said.

"That helps improve the overall life of the vehicle," he said.

Western states have the oldest better quality and technology al- vehicles at 12.4 years, while in lows people to keep them on the the Northeast the average age is only 10.9 years.

That's due largely to less stopand-start traffic that wears on a vehicle, Seng said.

Differing weather conditions can also play a big part in how long owners keep their vehicles in different states across the country.

Montana has the oldest average age at 16.6 years, while the voungest is is the state of Vermont, known for its cold winters, with an average age of 9.9 years.

The aging vehicles should be a boon to repair shops, which may want to change strategies so that they can cater to the owners of older vehicles on the road who may want to spend less on parts, Seng said.

And that wasn't the only record.

The number of light vehicles in use in the United States also hit a record of more than 278 million this year, according to IHS, which tracks vehicle registrations across the country.



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Domino's Joins Chevy Infotainment System

New automotive technology is improving a lot of things in life, including the delivery of hot, fresh pizza.

Millions of eligible Chevrolet drivers can now order their favorite Domino's pizza from their in-vehicle touchscreen so it's ready for carryout when they get to the store or will arrive at their home if they choose delivery, said GM spokeswoman Stephanie Lang. Domino's is the latest merchant added to Chevrolet Marketplace, the industry's first in-vehicle commerce platform.

Valid offers can vary. For latest check Marketplace through the vehicle mobile app or your vehicle's infotainment system (if available).

Marketplace, Within customers will be able to place a saved order or a recent order from their Domino's Pizza Profile with a few taps on the screen, Lang said.

With their preferences already set, customers can easily pick up the pizza in-store or have it delivered to their home. Chevrolet Marketplace works independently of the drivers' mobile device, making this the first embedded pizza-ordering option in vehicles

"Domino's has offered pizza lovers innovative ordering and delivery options for years. At the same time, Chevrolet put technologies in place that allows us to add capabilities to vehicles already on the road, like the ability for our drivers to order pizza through the touchscreen," said Scott Goddard, Marketplace line of business leader at Chevrolet. "This new in-vehicle solution is a natural collaboration that both Chevy drivers and pizza connoisseurs can enjoy.'

To place pizza orders through Marketplace, users first need to set up a free Pizza Profile with Domino's, either online or through their Domino's mobile app, Goddard said. The profile will include a preferred delivery address, preferred stores and payment method information, as well as the chance to create and save a favorite order as an Easy Order.

Through Marketplace, users will link their Pizza Profile to their vehicle, allowing for simple ordering in the future.

"We admire Chevy's commitment to providing the technology that consumers want the most," said Chris Roeser, director of digital experience at Domi-

no's. "Now, Marketplace will provide pizza lovers an easy way to order the pizza they love.'

Marketplace debuted in December 2017 as a free service in connected Chevrolet, Buick, GMC and Cadillac vehicles and has steadily added new functionality over time, Lang said. Last spring, Chevrolet debuted the first embedded in-dash fuel payment capability.

Domino's is the first pizza restaurant on the platform. Marketplace is available on millions of properly equipped model year 2017 and newer Chevrolet vehi-



A new app for Chevrolet cars makes ordering pizza easy as pie.

Mitsubishi Moving Its HQ

NASHVILLE, Tenn. (AP) - Mitsubishi Motors announced on June 25 that it is relocating its North America headquarters from California to Tennessee, a move that will bring the Japanese automaker closer to its sister company Nissan and strengthen Tennessee's growing reputation as an epicenter of the automotive sector.

Tennessee Gov. Bill Lee and Department of Economic and Community Development Commissioner Bob Rolfe - who made the announcement with Mitsubishi Motors North America say the headquarters move from Cypress, Calif., to Franklin, Tenn., will result in an \$18.25 million investment in the region and approximately 200 jobs.

Lee and Rolfe added that they met with Mitsubishi's global executives last month to convince them to move to Tennessee while in Japan during the Republican governor's first trade mission. It is unclear what financial incentives state officials offered Mitsubishi to move to Ten-

"As we drive toward the future, this is the perfect time for us to move to a new home. While we say farewell to the Golden State with a heavy heart, we're excited to say hello to Music City," Fred Diaz, Mitsubishi Motors North America's president and CEO, said in a statement.

Franklin is located just south of Nashville, also known as "Music City," and is home to the state's most powerful Republicans, ranging from Gov. Lee, U.S. Sen. Marsha Blackburn and House Speaker Glen Casada.

Mitsubishi's relocation announcement is the latest move in an industry that has found a warm reception in recent years in the American South, where politicians tend to take a dim view of labor unions and aggressive regulation.

"Over the years, Tennessee has become the epicenter of the Southeast's thriving automotive sector, and I'm proud Mitsubishi Motors will call Franklin its U.S. home and bring 200 high-quality jobs to Middle Tennessee," Lee, who took over the office this year, said in a statement.

Mitsubishi Motors' North America headquarters has been located in California since 1988. The company expects the relocation will begin in August and will be completed by the end of the year. Initially, a temporary office will handle operations to allow the company time to identify a permanent office.

Company officials say the move is part an ongoing effort to "reinvent every aspect of Mitsubishi Motors in the U.S.," as well as strengthen the Renault-Nissan-Mitsubishi Alliance.

Nissan has a production plant in Smyrna, Tenn., and owns a 34 percent stake in Mitsubishi Mo-

Last month, Mitsubishi Motors Corp. shareholders approved the ouster of Carlos Ghosn, who was pivotal in the Japanese automaker's three-way partnership with Nissan and French automaker Renault until he was arrested on financial misconduct charges last year. Ghosn says he is inno-

Mitsubishi shareholders then approved the appointment of Renault's chairman Jean-Dominique Senard to replace Ghosn. Renault owns 43 percent of Nissan.

Mitsubishi has also faced its own scandals.

In 2016, the company disclosed it falsified mileage data. That followed a massive coverup over decades of auto defects thought to have helped cause a fatal accident. In 2004, its president, Katsuhiko Kawasoe, was arrested. He was sentenced to three years in prison, suspended for five years, and did not serve time in jail.

Along with the Nissan plant, German automaker Volkswagen operates a plant in Chattanooga, Tenn. - the state's fourth-mostpopulated city. The company unveiled earlier this year an \$800 million expansion at the Tennessee plant, which is expected to create 1,000 jobs for electric vehicle production beginning in 2022. It's set to receive \$50 million in state incentives.

Recently, Volkswagen workers voted against forming a factorywide union - handing a blow to the United Auto Workers' efforts to gain a foothold among foreign auto facilities in the South.

Meanwhile, General Motors also has a large manufacturing plant in Tennessee. Additionally, more than 900 auto suppliers, including large ones, such as Hankook Tire and Bridgestone Americas, operate in Tennessee.

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