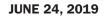
Tech Center News

WARREN, MICHIGAN

VOL. 44 NO. 41

Covers the Tech Center and the Immediate Area





2019 Ford Ranger



2019 Dodge Challenger



2019 Chevrolet Equinox

Regrets From Failed FCA **Renault Deal**

by ELAINE GANLEY Associated Press

PARIS (AP) - Renault's chairman on June 12 expressed his frustration with the French government for resisting a merger deal proposed by rival carmaker Fiat Chrysler, and at a critical time - ahead of what he views as a coming "tsunami" from China's auto industry.

Jean-Dominique Senard told a shareholders' meeting in Paris that "I have rarely seen a merger proposal that could give so much positive synergy, incredibly validating and robust.'

He said that at a board meeting convened to discuss the plan, everyone had approved the plan "with enthusiasm" except one. Board members from Renault's alliance member. Nissan, abstained but in a "very positive way.'

Senard said the French government, which is Renault's biggest shareholder with a 15 percent stake, had not shared his analysis of the benefits of the merger "at this stage."

"I can frankly say that disappoints me," he said.

Senard opened to the possibil-

CONTINUED ON PAGE 3

Detroit OEMs Beat Europe's in Quality Study

by Jim Stickford

The Koreans led the way in the 2019 J.D. Power Initial Quality Study (IQS), but Detroit automakers took four of the top 10 quality rankings.

Dave Sargent, vice president of Global Automotive at J.D. Power, spoke to the Automotive Press Association at a special gathering in Detroit on June 19, presenting the results of the 2019 IQS.

He said that once again the Korean brands - Genesis, Kia and Hyundai – took the top three spots. Ford and Lincoln brands finished fourth and fifth, the first time those two brands were in the top five spots in the same year. Chevrolet took the sixth spot and Dodge took the eighth spot.

American brands ahead of both Toyota and Lexus, Sargent said.

The survey methodology was the same as in past years. J.D. Power surveyed about 76,000 2019 model year new vehicle buyers about the quality of their vehicles 90 days after initial purchase. The rankings were broken down into problems per 100 vehicles (PPV) to get a score.

"We covered just about every major brand in the auto industry," Sargent said. "The lower the PPV, the better. The industry average was 93 PPVs. The Buick brand had a PPV of 92, finishing ahead of the industry average. It placed 11th on our list.

Genesis' PPV was 63, Kia 70, Hyundai 71, Ford 83, Lincoln 84, Chevrolet 85, Nissan 86, Dodge 90, the same as Toyota and Lexus.

"This was the first without an PPV industry average improvement since 2012-2014," Sargent said. "So this kind of thing is unusual, but it's not unheard of."

The survey found two kinds of problems, Sargent said. They could be broken down into a "defect" category and a "design" category. They saw a lot more defect category issues - like paint dents, noisy brakes and such this year.

"These are what we call 'traditional' defects," Sargent said. "As to why we saw more, we can't prove this, but given the fact that there was a sales slowdown, the sales turn rate was longer, it makes sense to consider that having a car sit out longer can cause thinks like paint chips.'

As to the concept of design de-These results put these four fects, that's something else, Sar-

gent said. If a part or system operates exactly as designed, but new buyers have problems with it, then there's nothing to be done.

"I always say, you shouldn't have automotive engineers design for other automotive engineers. They're not normal people when it comes to cars," Sargent said. "So having an entertainment system or a GPS system that is too complicated for people to use is a problem - and it's not something that the dealership can fix, like a paint chip."

There's only so much that a dealer can do in a situation like that, Sargent said. People refuse to read the operating manuals and having them sit through a three-hour demonstration of how every system works is not something most people want to do when they get a new car.

"Think about it," Sargent said. "You've just gotten a new car. You want to take it home and show it off. You don't want to sit in it at a dealership while someone shows all the systems.'

Advanced Driver Assist Systems (ADAS) are gaining consumer interest, but more vehicles with ADAS means there are more systems out there where things can go wrong. ADAS is improving, but its popularity is almost working against it.

"Our survey shows that customers want these systems," Sargent said. "The OEM who can deliver them in a way that works and has the trust of drivers will be the winner in ADAS.

Sargent said that, traditionally,

Ford Creates Local Information and Community Center

by Jim Stickford

Ford is working hard to be a good neighbor.

That, according to Lucia Soto, acting spokesperson for Ford at the opening of the company's "Michigan Central Information Center" at 1907 Michigan Avenue in Detroit.

The office had its debut on June 19, exactly one year after Ford announced that the Dearborn automaker was purchasing the old Michigan Center train station for the purpose of refurbishing.

The information center is located in a building known as The Factory and is meant to be a

place where people in the neighborhood can go to learn about the progress of Ford's efforts in Corktown

It is also meant to be something of a community anchor, said Soto.

"We want this to be a place where people can go to get information, not just on the progress of Ford's construction, but on events and people who are in the neighborhood," Soto said. "If someone has anything to announce, they can come here and we can put it up as sort of a community bulletin board.'

John Vincent, a technical spe-

CONTINUED ON PAGE 2



Corktown residents check out Ford's new local information center.

Lawrence Tech Engineering

CONTINUED ON PAGE 2



These LTU engineering students carried on a school tradition by winning a ground vehicle design contest.

Students Win Design Event

Lawrence Technological University has won first place in the Self-Drive Challenge event at the 27th annual Intelligent Ground Vehicle Competition.

LTU was crowned champ on June 10 after four days of competition at Oakland University in Rochester, said LTU spokesman Matt Roush.

The winning vehicle is called ACTor, for Autonomous Campus Transport/Taxi. The two-seat Polaris Gem electric vehicle was donated to the university through a gift from Hyundai MO-BIS, the parts and service division of the Korean automaker.

Dataspeed Inc., a Rochester Hills engineering firm specializing in mobile robotics, converted the vehicle to a drive-by-wire system, Roush said. Also donat-

For the third consecutive year, ing to the effort were a pair of Ann Arbor high-tech firms. Soar Technology Inc. provided a LI-DAR (laser-based radar) unit to help the vehicle find its way, while Realtime Technologies Inc., a simulation technology firm, and the auto supplier Denso provided cash donations for onboard computers and other parts. Veoneer, a spinoff of the Swedish auto supplier Autoliv, provided a 3D LIDAR as well as automotive radars.

The win included a \$3,000 prize and plaque.

Embry-Riddle Aeronautical University of Daytona Beach, Fla., finished second in the event, while Bob Jones University of Greenville, S.C., finished third. Other competitors in the Self-Dri-

CONTINUED ON PAGE 2

View This Week's Edition at http://TechCenterNews.com

Tech Center News®

31201 Chicago Road South Warren, Michigan 48093

586-939-6800

Contact us: Info@TechCenterNews.com

Deadline: Thursday 5:00 p.m. for the next edition of Monday

William Springer II, publisher Lisa A. Torretta, operations Jim Stickford, editor

Tech Center News is a registered trademark of Springer Publishing Co.

www.TechCenterNews.com

LTU Team Wins **Ground Vehicle Design Contest**

CONTINUED FROM PAGE 1

ve challenge included Oakland University, the University of Detroit-Mercy and the U.S. Military Academy at West Point.

Coached by C.J. Chung, professor of computer science at LTU, the team was comprised of undergraduate computer science majors Sean Bleicher of Fenton, Charles Faulkner of Aurora, Ill., and Mitchell Pleune of Rochester Hills, team captain. Nick Paul of Plymouth, an LTU IGVC team alumnus now employed at Soar Technology and an adjunct professor at LTU, was a co-coach.

The IGVC was established in 1993 by the U.S. Army's Combat Capabilities Development Command (CCDC) Ground Vehicle Systems Center (formerly known as TARDEC) and the Association for Unmanned Vehicle Systems International. Sponsors include GLS&T, RoboNation, Hyundai MOBIS, the Michigan chapter of the National Defense Industrial Association, Continental, Northrop Grumman, Veoneer, Molex, OpenJAUS, Roush, Robotic Research, FCA, FEDITC LLC, FEV, IAmRobotics, Magna, Gener-Dynamics Land Systems, al Brightwing, Dataspeed, and MathWorks.

Ford Creates Corktown Information Center

CONTINUED FROM PAGE 1

cialist mobility researcher at Ford, was also at the information center's debut to show how Ford is using the latest technology to try to mitigate any traffic problems in the neighborhood as a result of new businesses visiting as a result of the Michigan Central project.

"Ford is investing in new forms of mobility," Vincent said. "So we need to monitor how these vehicles perform across the city's eco-system, and how they move and how they interact with the neighborhoods. We need to know what impact they will have on the city.'

To that end, Ford is using computer modeling and computer simulations as part of the company's research, Vincent said. Some of the work was shown on table and wall displays to people visiting the information center.

'The table display shows our research and the progress it has made," Vincent said. "It shows how our solutions in new mobility, such as e-scooters and shared mobility shuttle service, might affect traffic in the neighborhood around the Michigan Central project. This information includes, but is not limited to carbon emissions. energy consumption, street space and curb space. With this information, we hope to be able to visualize and analyze the transportation demographic and other data in support of a better transportation system."

Vincent said that the simulations go up to the year 2023, comparing what the traffic would be like if Ford wasn't doing anything to projected traffic patterns as Ford's project progresses.

"Ultimately, we are looking at things like self-driving cars, Spin e-scooters and shared mobility shuttles and how their use might mitigate traffic issues," Vincent said

"We've learned a lot from local residents and businesses over the past year as we further our plans for the development of

CO-CREATIN THE FUTU LIF MINRIL EV

Vincent explains how Ford is collecting data to find ways to mitigate traffic issues caused by its presence.

Michigan Central Station," said Mary Culler, Detroit development director for Ford Motor Company. "Our new information center will provide an ongoing opportunity to share our plans, celebrate the culture of the area and continue learning from the community. In this historic neighborhood, we're building a place where people can solve real-world challenges and create future opportunities together.'

In December, the company launched a pilot program using its ride-hailing service GoRide to help families pick up meals and attend appointments at local food banks, Culler said. Spin, an electric scooter startup Ford acquired last year, has expanded its fleet of scooters in Corktown to make it easier for residents and visitors to get around.

Argo AI, Ford's partner for autonomous vehicle system development, started on-road testing of a Ford Fusion Hybrid self-driving vehicle in Detroit earlier this month, Culler said. Similar vehicles are already deployed in Pittsburgh, Palo Alto, Miami and Washington, D.C., in an effort to learn more about how autonomous technology can be used in various urban environments. Ford's self-driving vehicle business unit, based at The Factory at Corktown, has made a \$1 billion investment in Argo AI, an artificial intelligence company.

Ford's City:One Challenge is also launching in Detroit this month.

designed to bring together residents, businesses and community groups to propose and pilot solu-

The crowd-sourcing program is tions to improve mobility for current and future residents of the Michigan Central Station development area, Culler said.

Detroit OEMs Initial Quality Scores Beat Europeans

CONTINUED FROM PAGE 1

when a new vehicle is launched it has more problems. It usually takes about a year for an OEM to work out all the bugs of production. That pattern held true in 2019. Newly-launched vehicles had a PPV score of about 10 higher than carryover models.

Detroit manufacturers took the top spots in several categories, Sargent said. The Chevrolet Malibu and the Ford Fusion tied for first in the Midsize Car category.

The Chevrolet Equinox took first in Compact SUV, while the Ford Escape was second. The Dodge Grand Caravan was second in the Minivan Category. The Dodge Challenger was the highest rated vehicle in the Midsize Sporty Car category. The Chrysler 300 took the third spot in the Large Car category.

Detroit OEMs also did well in the Compact SUV category, with the Chevrolet Equinox finishing first and the Ford Escape finishing second.

The Chevrolet Tahoe was top in the Large SUV category, while



Dave Sargent

the Ford Expedition took third.

The Ford Ranger was first in the Midsize SUV category, Sargent said. That was unusual because it was launched in the U.S. market in 2019.

In the Large Premium SUV category, the Cadillac Escalade took first and the Lincoln Navigator took second. In the Large Heavy Duty Pickup Truck category, the Chevrolet Silverado HD was first and the Ford Super Duty was second.

In the Midsize SUV category, the Ford Flex was second and the Jeep Grand Cherokee was third.

"I have to say that the Dodge brand had a good year," Sargent said. "This was the first time they finished ahead of the industry average. The Jeep Grand Cherokee did well, and the Challenger won a by a pretty decent margin in its category. Chevrolet was tops in four pretty important categories. "Ford having both its brand and the Lincoln brand finishing in the top five is an accomplishment. But Ford's PPV score of 83 is closer to the industry average PPV score of 93 than the Genesis PPV score of 63, the Kia score of 70 and the Hyundai score of 71.





WE CAN HELP YOU GET THE **TIRES AND SERVICE YOU WANT!**

WARREN

8038 E 12 Mile Rd

586-573-4900

• Tire Services	 Brakes 	 Preventive 	 Suspension
 Alignments 	 Oil Changes 	Maintenance	 And More!

GOODÿYEA

MADISON HEIGHTS 28581 DeQuindre 248-541-1244

Visit GoodyearAutoService.com to schedule an appointment.



Tech Center News

JUNE 24, 2019

COVERS THE TECH CENTER AND THE IMMEDIATE AREA

Tech Center Gets New Hardware, Software Testing Labs

GM's Global Technical Center software and hardware developin Warren is home to one of the world's largest vehicle hardware and software automotive test labs in the world.

It is also foundational for realizing GM's next-generation of vehicles, EVs, and technologies like Super Cruise, all key to the company's vision, said Cynthia Bay. director of Global Vehicle Motion Embedded Controls, Software & Cyber Security Validation.

At nearly 100,000 square feet of space, the high-tech Electrical Integration lab located inside GM's Alternative Energy Center is home to rows of mainframe-like electrical benches that each represent a current or future vehicle or technology, dedicated cybersecurity and speech recognition test areas, and other key functions.

vehicle's electrical system switches, buttons, software modules, wiring, and more, Bay said.

The recently expanded lab is

ment, validation and analysis.

It is also home to some of GM's most highly skilled and technical employees in engineering, cybersecurity, and software development. Bay said.

When you consider how complex vehicle systems have become with increasing amounts of new technology and features being offered to customers, you can imagine the facilities, tools, and talent needed to properly test and validate these systems," said Bay. "The highly technical and detailed work done by skilled engineers really sets GM apart from our competitors."

Within the lab, new dedicated cybersecurity and speech recognition areas are key to evaluating and testing systems.

Cybersecurity is a critical ele-The benches contain an entire ment built into GM's next-generation digital vehicle platform - internally known as Global B from the beginning, Bay said.

The lab allows a dedicated ground zero for ongoing vehicle team of GM cyber employees to



test various strategies for an increasingly robust and protected electrical system. The speech recognition laboratory confirms and improves performance of GM's in-vehicle speech recognition systems.

GM's next-generation digital vehicle platform was recently announced and goes into production later this year first on the recently unveiled 2020 Cadillac CT5 sedan, Bay said.

The technology will be in most vehicles within General Motor's global lineup by the year 2025, Bay said.

RED WING

Hoover Road Gets More Road Work Starting Today

More road construction work will begin on Hoover in Warren, starting on June 24.

Jodi Johnstone of the Warren Engineering Division of the city's Department of Public Works said the construction will be actually made up of two different projects.

There will be a road repair project between 13 and 14 Mile roads along Hoover, Johnstone said.

Then there will be water main repair work being done along Hoover from 13 Mile to Masonic, as well.

All told, the two projects will require several months of construction time.

We expect the projects, if everything goes according to schedule and there are no unforeseen circumstances, to be completed in November," Johnstone said.

Some Regret FCA Renault Merger Failure

CONTINUED FROM PAGE 1

ity of reopening talks, saying that the merger proposal "remains in my head potentially remarkable and exceptional."

Fiat Chrysler had proposed a 50-50 merger that would have created the world's third-largest carmaker worth almost \$40 billion. But the role of Nissan, Renault's longtime alliance partner, was unclear and the French government wanted more time to sort out the details. Fiat Chrysler pulled the proposal, citing political conditions in France.

Renault's alliance with Nissan has become strained since the arrest last November in Tokyo of former chairman and CEO Carlos Ghosn, who is no longer in the company. Ghosn has been charged with falsifying financial reports in under-reporting compensation and breach of trust in having Nissan Motor Co. shoulder investment losses and paying a Saudi businessman.

The upheaval led to a restructuring of Renault with Senard brought in and Thierry Bollore becoming the new chief executive

While the Ghosn saga dominated headlines for months, it was the merger failure that was on the minds of many shareholders on June 12.

"I was surprised to see FCA (Fiat-Chrysler Automobiles) pose an ultimatum, saying it's 'Take it or leave it and we won't let you take the time to think about it," said Herve Charron, a retiree heading into the meeting. "It's a bit scandalous. When the stakes are at 30 billion euros, you have to think and take your time.'

Another shareholder was more philosophical.

"I was quite surprised (after negotiations with Fiat-Chrysler fell through) but that's business. Half of all mergers go awry. This one didn't even happen!" said Daniel De Rincquesen.

Answering questions from shareholders on the merger failure. Senard said the wider industry context was critical, notably looming rivalry from the fastgrowing Chinese auto industry.

We face a period in which the blossoming of the Chinese industry will probably translate into a form of tsunami" in our region, Senard said. Anticipation and strength are essential, he added.

Senard said he quickly realized that a merger with Fiat Chrysler had something for both Renault and the alliance between Renault, Nissan and Mitsubishi.



Learn How to Protect Data

The Macomb County Department of Planning and Economic Development (PED) is publicizing several events that will help businesses learn how to protect sensitive data.

On Tuesday, June 25, the Small Business Development Center of Michigan (SBDC) will be holding a special Webinar between 11 a.m. and noon about how small businesses can protect their data from being breached.

There is no cost to log onto the Webinar, said Scott Taber, **BDC's Cyber Security Awareness** Program specialist.

Registration ends at 10 a.m. June 25, Taber said.

On Wednesday, June 26, the Oakland County Department of Economic Developmet and Community Affairs is holding a seminar titled "Cyber Security Hacks in Health Care: Protecting Your Health Data.'

The seminar begins at 8:30 a.m. and will last three hours.

It will be held at the Velocity Collaboration Center, 6633 18 Mile Road, in Sterling Heights.

This event is for IT administrators, IT professionals and those in the general public who want to learn more about how the health care industry can build an effective defense against cybercrime. FBI Special Agent Benjamin Simon and FBI Intelligence Analyst Matthew Schwieger are members of the FBI Detroit Cyber Task Force. The Cyber Task Force is responsible for criminal and national security computer intrusion investigations in Michigan. The costis free. To learn more contact Chelsea Schutz at schutzc@oakgov.com.



New Bridge Plan Receives a Look

DETROIT (AP) - Details of community benefits tied to a commuter bridge being built between Detroit and Canada have been released.

Officials and elected leaders from Michigan and Canada said June 14 that the plan calls for helping foster the growth of small regional companies and encouraging residents on both sides of the Detroit River to apply for Gordie Howe International Bridge project-related jobs and training. The plan also has a \$20 million neighborhood infrastructure investment strategy that includes about \$8 million for aesthetics and landscaping.

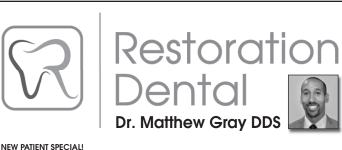
Officials say the plan will be financed by Canada.

The \$4.4 billion bridge is expected to open in 2024. When completed, it will connect Windsor, Ontario, with Detroit.

"Do you have a technology plan to prepare for the worst? Join us as we discuss how to be prepared for a data breach and what to do after you experience one," Taber said. "We'll walk you through a quick-paced webinar, ask a few poll questions of the audience, and give you time for question and answer."

Taber said people interested in viewing the Webinar can register online by visiting sbdcmichigan.org/workshop.





SERVICES WE OFFER ... Family and General Dentistry Crowns and Bridges • Root Canals • Extractions • Implants Invisalign
 Teeth whitening

Call for your appointment today! 248-399-1200

FREE

Exam, Full Mouth

X-Rays & Fluoride

when paying

(some restrictions apply)

for cleaning

26831 Woodward Ave. Huntington Woods, MI. 48070 restorationdent@gmail.com

NOW ACCEPTING NEW PATIENTS!!

TECH CENTER NEWS - WARREN

TRAVELNG SOUTH Stop and See First Wrecker

Did you know that the first tow truck was built using a Cadillac store," Brumgard said. "He did body?

Those driving South this summer might want to explore an unusual part of automotive history - the International Towing and Recovery Hall of Fame and Museum in Chattanooga, Tenn., just off I-24, near where it intersects with I-75.

Cathy Brumgard, director of the International Towing and Recovery Hall of Fame and Museum, said the museum has been officially opened at its present location at 3315 Broad Street in 1995

"It all really started back in 1986," Brumgard said. "Some men belonging to a group called 'the Friends of Towing' created a display of towing paraphernalia. I'm talking about things like flares and smudge pots and other items that might be associated with tow trucks over the years. They put the gear in a tractor trailer and hauled the truck around the country to display at car shows and such.³

In 1995 it was decided to create a permanent museum and Chattanooga was chosen because the city is the birthplace of the tow truck, Brumgard said.

'The tow truck was invented in 1916 by named Ernest Holmes,' Brumgard said. "When he was young he had a neighbor who was a mechanic and Ernest loved to watch him work."

Apparently Holmes wanted to be a mechanic himself, but his parents discouraged him after the neighbor poked one of Holmes' eyes. He took his parents' advice and got a job at a local department store called Loveman's.

"He did a lot of jobs at the some designing, worked in shipping. Apparently, in those days you did whatever needed doing and jobs weren't so clearly defined. Anyway, he wasn't very happy and his wife, named Hattie, came into an inheritance and suggested they use the money to set up his own workshop.'

And that's what Holmes did, Brumgard said. He started his own car repair shop. As vehicles became more popular, Holmes was getting a lot of telephone calls from people whose vehicles had broken down.

"Chattanooga is by a mountain and a river, so people were often driving their cars into the river bank or into ditches by the mountain," Brumgard said. "So Holmes would get six or eight men to come with him when he'd get a call to fetch a car. They'd literally tie ropes to the vehicles and the men would have to pull them out of the ditch or river bank. Holmes said that there had to be a better way, so he started experimenting. That's how the tow truck was created. The first one was built off a1913 Cadillac body. He patented it in 1919, and liked to use Packards for his trucks because they were light weight and sturdy enough to haul heavy cars."

He started the Ernest Holmes Company, which manufactured tow trucks until it was sold to the Dover Corporation in 1973.

The current museum is located only three miles from Holmes' original workshop where the first tow truck was made, Brumgard said. The museum features an accurate replica of Holmes' first tow truck.

The first tow truck, seen here pulling a car out of a ditch, was actually built on a Cadillac body in 1916.

Other displays include 20 fully-restored tow trucks from the past 100 years. Among them is a a 1948 COE Chevrolet Truck with a Holmes 515 bed mounted on the back. Peter Aspesi purchased this truck in 1996 from Gannon Chevrolet in Westboro, Mass., and a W-45 wrecker was manufactured in Chattanooga, Tenn. by the Ernest Holmes Company from 1941 until 1949. A total of 7,238 units were built. This wrecker was manufactured in early 1943 and has a rating of 15 tons. The wrecker was

This reproduction of the first tow truck is on display at the museum.

The museum's summer hours AAA members, \$6 for children are 9 a.m. to 5 p.m. Monday through Saturday, 11 a.m. to 5 p.m. Sundays.

for seniors and military, \$8.50 for nationaltowingmuseum.org.

ages six to 14. Children five and under get in for free.

To learn more about the muse-Tickets are \$10 fod adults, \$9 um and its exhibits, go to inter-



Join us as we feed and give hope to those who need it



SEG's 48V E-Motor Powers Bike to Third

As their first venture into racing, a team of engineers from SEG Automotive of Novi competed in this year's Totalbike24 competition on June 15-16 in Kecskemét, Hungary. The team finished third in the eScooter category.

used in France, after the invasion

in conjunction with the Red Ball

the Army truck line that deliv-

ered critically needed supplies

to the front lines during WWII.

This wrecker was used by the

U.S. Army until December 1947

when it was given to the French

The Red Ball Express was

Express

Army.

The team used a modified E-Schwalbe, said SEG spokesman Christoph Hölzl. It is a relaunched version of the bike from former East-Germany, and is powered by a 48V e-motor made by SEG Automotive.

"Our engineers are driven by a passion for innovation at work and a love for motor bikes in their free time. Now they will bring their engineering and racing skills together to represent our company at this year's Totalbike24," said Uwe Mang, commercial general manager of the Miskolc division of SEG Automo-

The SEG development centre in Miskolc has been involved in the development and the testing of the BRM – so the engineering team is well familiar with its efficient performance.

"We believe in our people and our products. Accordingly, SEG Automotive is covering all costs for entering the race to make our employees' dream of competing a reality and we decided to become an official sponsor of the event," said Mang.

Over the last weeks, the engineers have dedicated countless hours outside working time to turn a regular E-Schwalbe into a customized version ready to face the trials of a 24 hour race, Hölzlsaid. Among other modifications, they added the possibility to change battery packs to eliminate re-charging times.

over 30 teams compete in both their engineering and motorbike driving skills by driving modified scooters for 24 straight hours, Hölzl said. This year's competition on June 15 and June16 featured both a traditional race and an e-scooter category.

Mang said the BRM also transforms any conventional internal combustion engine car into an efficient mild-hybrid with minimal effort: The 48V BRM replaces the 12-volt generator on the belt drive (P0 topology), so there is no need for complex and expensive high-voltage protection systems or wiring harnesses.

By recuperating braking energy and re-using it to power the vehicle, the BRM reduces fuel consumption and CO2 emissions by up to 15 percent under real world driving conditionsm Man

most.

Donations to Grace Centers of Hope can be made at our website or call us at the number provided below.







Find us on Facebook, Twitter, and Vimeo



tive

Totalbike24 is a race where said



The SEG 48 volt engine powered the company's e-scooter to a third-place finish at this year's Totalbike24 race.

General Motors Petitions Feds On Takata Air Bag Recall

DETROIT (AP) - General Motors is trying to avoid recalling potentially deadly Takata air bag inflators in thousands of full-size pickup trucks and SUVs for the fourth straight year, leaving owners to wonder if vehicles are safe to drive.

The automaker petitioned the National Highway Traffic Safety Administration to exempt it from recalls that were required under a 2015 agreement between Takata and the government.

Takata inflators can explode with too much force, blowing apart a metal canister and spewing shrapnel.

Twenty-four people have been killed and hundreds injured by the inflators worldwide.

For GM, the stakes are high. If NHTSA requires it to do all the recalls, the company will have to repair more than 6 million trucks and SUVs at a cost of \$1.2 billion, more than half the profit reported by the company in its most recent quarter.

GM's petition, posted June 19 by the government, says the inflators are unique to GM and are safe, with no explosions even though nearly 67,000 air bags have deployed in the field.

But Takata declared the GM front passenger inflators defective under a 2015 agreement with the government. GM's efforts to avoid the recalls raise questions about whether the inflators are safe and why NHTSA has taken more than three years to rule on GM's petitions. The first one was filed in May of 2016.

'Any fool can see that they're just stalling for time," said Craig Kohlhorst of Wellington, Fla., who recently traded in a 2007 Chevrolet Suburban in part because of the danger presented by the air bags. "They figure if they keep stalling, it'll go away and they won't have to expend the funds to address the issue.'

Takata used the volatile chemical ammonium nitrate to create a small explosion and inflate air bags. But high humidity and hot temperatures can cause the chemical to deteriorate and burn too fast, blowing apart metal canisters designed to contain the explosions and hurling shrapnel. At least 24 people have been killed worldwide and 200 have been hurt.

The problem forced the Japanese company into bankruptcy protection and touched off the largest series of automotive recalls in U.S. history including up to 69 million inflators in the U.S. alone. The recalls are being phased in based on the age of vehicles and exposure to high temperatures and humidity.

Kohlhorst said he was afraid to drive the Suburban because his wife and 15-year-old daughter sat in the front passenger seat and would have been hit by shrapnel if the inflator exploded. Also, shrapnel could have flown into the back seat where his 4-yearold daughter sat. He traded in the Suburban because of its age and rising cost of maintenance, but said the air bags made him trade sooner than he would have liked. In its place he got a new Toyota Corolla, largely for his older daughter to drive.

Even though GM filed the petition in January, NHTSA didn't publish it in the Federal Register as required until Wednesday. GM also had to file recall paperwork, but NHTSA does not make that public until a decision is made on the petitions.

A spokeswoman for NHTSA said June 19 that she would check on questions about the length of time it's taking to make a decision.

The agency consolidated all four GM petitions into one and said it would take public comment at regulations.gov/document?D=NHTSA-2016-0124-0246 until July 18.

In its petition, GM said Northrop Grumman tested 4,270 inflators by artificially exposing them to added humidity and temperature cycling, and there were no explosions or abnormal deployments. It says GM has "established that worse-than-worstcase humidity exposure and temperature cycling will not cause inflator ruptures ... at any point within even unrealistically conservative vehicle service life estimates."

The company simulated aging of the inflators for an estimated 35 years, the petition said.

GM said in a prepared statement that it's confident the vehicles "do not present an unreasonable risk to safety, continue to perform as designed in the field and will continue to perform as designed.'

Tests on one inflator taken from a 2007 Chevrolet Silverado showed abnormally high pressure inside the canister, but it did not rupture.

GM also said its trucks have solar-absorbing glass that holds down cabin temperatures, keeping the inflators cooler and reducing hot-and-cold cycles that cause the ammonium nitrate to deteriorate.

Jason Levine, executive director of the Center for Auto Safety, a nonprofit consumer group, said NHTSA appears to be paralyzed in the GM case. Information provided by GM thus far isn't sufficient for NHTSA to approve the petition, said Levine, who questions the validity of some tests done for GM. He questioned the need for a delay by NHTSA in making a decision. "There's millions of these things on the road. It is not right. It's bad policy, bad practice," Levine said. "It only engenders concern and fear potentially unnecessarily. NHTSA needs to do its job."

Under NHTSA's agreement with Takata, GM should be recalling the 2010-2014 Chevrolet Silverado and GMC Sierra heavy duty pickups this year, as well as 2010-2013 light duty Silverados and Sierras. Also covered are the 2010-2014 Chevrolet Tahoe and Suburban SUVs, the 2010-2014 Cadillac Escalade SUV, and the 2010-2014 GMC Yukon SUV.

All of the recalls are being phased in by age of vehicles and areas of the country where they are located.

Because General Motors filed its petition to avoid the recalls, owners will not be notified that their vehicles have the potentially dangerous inflators, according to NHTSA.

JAN

Wealth Management

See Lingenfelter **Collection Over Some Coffee**

From June 1 to Aug. 24, car enthusiasts are invited to start each summer weekend enjoying auto "show and tell" at Lingenfelter Cars & Coffee, powered by LaFontaine Automotive Group. Each Saturday morning event will open from 8 - 10 a.m., rain or shine. All makes and models welcome, said Lingenfelter spokesman Chris Morrisroe.

There is no fee to participate but guests are asked to donate to Gleaners Community Food Bank.

Nonperishable food items and monetary donations will be accepted on-site this summer, Morrisroe said.

Attendees will have the opportunity to enjoy refreshments including coffee by Laperfetto Cappuccino, browse the indoor showroom, display their personalized cars, and meet other car buffs from the community and around the country.

Updates on weekend special activities and featured cars from the Lingenfelter Collection will be posted on Lingenfelter Cars& Coffee Facebook page and website: www.lingenfelter.com, Morrisroe said.

Lingenfelter's address is 47451 Avante Drive in Wixom. It is close to where I-96 and Beck Road connect

"Come on down, it'll be a lot of fun," Morrisroe said.

U.S. Grant's Michigan Home Moved

home of President Ulysses S. Grant is being moved from the former Michigan State Fairgrounds to the Eastern Market, where it will be refashioned as a public education and resource center.

Sandra Clark, the director the Michigan History Center, said Thursday that the two-story white clapboard house that was built in the 1830s will be renovated and established as a museum to celebrate the nation's 18th president.

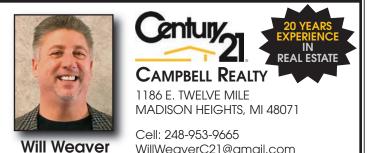
This will not be a traditional house museum," said Clark. "Our hope is to make it a place to explore Grant's life and the impact he made on Detroit while living here and in his later actions as a

DETROIT (AP) - The Detroit Civil War general and U.S. president.'

> Grant lived at the house with his wife, Julia Dent, from April of 1849 until May of 1850. Their first son, Frederick, was born there.

> The Michigan State Housing and Development Authority has provided a grant to support the move. Clark said it could cost as much as \$200,000 to get the house ready to relocate. The move is tentatively scheduled for August, but the operation to renovate and secure the property could take as long as two years.

> The home was saved from demolition in 1936 when the Michigan Mutual Liability Co. insurance company bought it and presented it as a gift to the fairgrounds.



Visit us online at

Service.

New Site. New Style. Same Great

WillWeaverC21@gmail.com

HOME WARRANTY* to any one who Buys and or Sells with me!!!



www.KaydanWealthManagement.com

New features include:

- Intuitive questionnaires
 Events calendar
- Appointment booking
- Wealth tools & videos
- New Blog
- Kaydan Cares
- Career opportunities
- Pay Your Invoice

329 W. Silver Lake Road Fenton, MI 48430 P. 810-593-1624 | F. 810-593-1643



2701 Cambridge Court, Ste. 412 Auburn Hills, MI 48326 P. 800-638-6900 | F. 248-625-7032

www.KaydanWealthManagement.com

Kaydan Wealth Management, Inc. is not a registered broker/dealer and is independent of Raymond James Financial Services, Inc. Securities offered through Raymond James Financial Services, Inc., member FINRA/SIPC. Investment Advisory Services offered through Raymond James Financial Services Advisors, Inc. and Kaydan Wealth Management, Inc.

CALL

Thanks for making Buff Whelan Chevrolet the #1 DEALER IN THE U.S.A. 2 years in a row

OVER 1,000 New Chevrolets in Stock!



*See dealer for details. All Rebates/Incentives have been deducted from sale price/payment and are subject to change by manufacturer without notice. All payments assume GM Employee Discount and GM Lease Loyalty. To qualify for GM Lease Loyalty you must have a GM Lease in the household. All lease payments are based on 10,000 miles per year. 1st payment, tax, title and plate fee due at signing on all leases ess otherwise noted. All deals expire 06/30/2019.



New COO at Spartan Motors

Todd A. Heavin was appointed Chief Operating Officer of Spartan Motors, Inc. of Charlotte, a North American automobile design company that designs, engineers and manufactures specialty chassis, specialty vehicles, truck bodies and aftermarket parts for the recreational vehicle, emergency response, government services, defense, and delivery and service markets.

With comprehensive executive and operational leadership experience spanning over three decades, Heavin brings extensive knowledge in driving operational improvement with lean manufacturing systems, successfully leading multiple mergers and acquisitions through integration across companies large and small, and gaining efficiencies through operational excellence, said Spartan spokeswoman Samara Hamilton.

In this role, Heavin will leverage and enhance the Spartan Production System. Spartan's manufacturing, engineering, quality assurance, supply chain management, project management, and environmental health and safety teams will report to Heavin immediately.

"Todd is a seasoned and trusted operational leader who consistently delivers results," said Daryl Adams, President and Chief Executive Officer, Spartan Motors. "I have tremendous confidence in his ability to further align our team to drive the business forward with purpose as we pursue the next generation of market leadership for Spartan."

Heavin, a proven multi-site operations and lean manufacturing leader with vast Tier I automotive supplier experience, will leverage and improve upon Spartan's highly skilled operational team in pursuit of long-term sustainable growth. He brings global



Todd Heavin

and domestic operations leadership experience, as well as automotive supply base operations management and segment leadership roles at suppliers and final-stage manufacturers across the supply chain. Additionally, he brings a wealth of highly profitable merger, acquisition, integration and restructuring experience to the Company.

"Spartan Motors is at a unique point on their growth trajectory where the right strategies and a refocus on operational metrics, alongside the implementation of the lean manufacturing and continuous improvement principles of the Spartan Production System, can yield immediate and significant returns," said Heavin. "I look forward to joining the Spartan team and fine tuning the operational machine that will take optimization to the next level. Spartan is far from the end of driving efficiencies in the business. The time is right to advance the business environment with emphasis on the operational metrics that will both foster organic growth and make inorganic expansion a more seamless experience for the organization and our customers alike.'



All leases are GMS with lease loyalty or conquest lease in household, plus tax doc. and CRV fees. See Dealer for details. Expires 7/1/19.

Please call with the vehicle you desire and you will be delighted with the payment.

BUICK

475 SUMMIT DRIVE • 248-292-2502 • 5825 HIGHLAND RD. (M59) • WATERFORD

CELL # 1-586-405-5175

blitvin@lunghamer.com

TECH CENTER NEWS - WARREN





CTK#1000E1

•5.3L V8 engine w/All Star Package •Power Seat •Rear Back Up Camera w/ Remote Start •18" All Terrain Tires •Trailer Brake Controller	stk#191961	•3.6 V6 Engine •Leather Interior with 8 way Power Seat •Heated Steering Wheel •Rear Back up Camera •Remote Start Package	sтк#192051 \$312/мо*
24 Month Lease <i>with</i> GM Lease Loyalty	WITH \$999 DOWN	36 Month Lease <i>with</i> <i>GM Lease Loyalty</i>	WITH \$999 DOWN
serrachevrolet.com		FIND NEW ROADS ⁻	
Showroom Hours Monday 9:00 AM - 9:00 PM Tuesday 9:00 AM - 7:00 PM Wednesday 9:00 AM - 7:00 PM Thursday 9:00 AM - 9:00 PM Friday 9:00 AM - 6:00 PM Saturday 9:00 AM - 4:00 PM		RRA	28111 Telegraph Road Southfield, MI 48034 www.serrachevrolet.com
Cred	It Approval	NORTH OF I-696 SERRACHEVROLI	
*All payments & retail prices are plus include GM Lease Loyalty/ Chevrolet Le Payments, Lease Payments do not requ To use the Chevrolet Lease Loyalty, y vehicle, Lease payments are bas	s TAX, TITLE, PLATE DOC FEE, & are calculate ase Loyalty or the Competitive Lease Incen ire a Security Deposit and require a disposi you must terminate your current lease at th ed on 10.000 miles or for CTP units, the rem	ed with the GM Employee Discount unless ot tive and are based on gualification and hav tion fee at lease end. You must be approved to time of new vehicle purchase, All Vehicle ainder of 10.000 miles per vear. Must take i	herwise notes. All payments/Prices e been deducted from the Sale Prices & I at Al Credit Tier through GM Financial. pictures do not represent the actual retail delivery by June 12th, 2019



CHEVROLET *All prices and payments include GM rebates. Pictures may not represent actual vehicle. Pricing subject to change per GM incentives. Prices and payments are inclusive of active GM employee discount (unless otherwise stated). All leases are 10,000 miles per year with approved A Tier credit. All Vehicles shown are \$999 down unless otherwise stated). All leases are 10,000 miles per year with approved A Tier credit. All Vehicles shown are \$999 down unless otherwise stated. Disposition Fee may be required at vehicle turn in. Must have lease logatity or lease conquest vehicle in household on certain models. Prices and payments are plus tax, title, plate, doc fee, refundable security deposit required on certain vehicles – to be determined by lender. Tahoe is a former courtesy vehicle. **\$3,500 trade in is valid on 2008 or newer vehicles w/ under 115k miles in drivable condition, no brandet titles, reconditioning determined by appraiser. Certain restrictions may apply, see dealer for complete details. Free appraisals on vehicles see salesman for details ** Exp date: 6/30//2019. www.EdRinke.com

GKN Powder Gets Ford Gets Its Dance On Via Community Grants New Auburn Hills

GKN Powder Metallurgy has opened its new North American Powder Metallurgy Headquarters and Additive Manufacturing (AM) Customer Center.

Headquarters

The 38,260 square foot facility, located in Auburn Hills expands the company's global 3D printing network and extends its scope of in-house powder metallurgy capabilities.

Housing more than 80 employees from the three GKN Powder Metallurgy's businesses. Hoeganaes, GKN Sinter Metals and GKN Additive, the space is designed to inspire teamwork and enhance exceptional customer experiences, said GKN spokeswoman Kayla Varicalli. The building includes 20,700 square feet of collaborative working areas and 17,700 square feet of shop floor space to complete the cohesive working environment.

'We are excited to start a new journey in Auburn Hills with a space that is dedicated to our team, our community and the advanced technology we create for our customers," said Reid Southby, President, GKN Sinter Metals Large Segment. "This building reinforces our commitment to the North American market and continued global growth.'

The building includes a 3,200 square foot AM Customer Center, equipped with two EOS M290 Direct Metal Laser Sinter (DMLS) printers. The DMLS machines incorporate powder bed fusion technology, creating functional prototypes within a two-week lead time and allowing customers to test factors such as usability, ergonomics, manufacturability and materials in the early stages of the development process.

This metro-Detroit location expands GKN Powder Metallurgy's global 3D printing network, providing customers the exclusive opportunity for efficient lead times and local customer support at their fingertips, Varicalli said

The building offers room for growth, and GKN Powder Metallurgy stays committed to global development in metal AM for prototypes, medium series and aftermarket.

'GKN Powder Metallurgy is at an exhilarating point in its journey of growth and innovation," Southby said. "We now have the opportunity to provide our customers and strategic partners with local and exceptional support on all fronts of our business.'

Man's Good Luck **Turns Bad Over Lottery Split**

ties to the neighborhoods it operates in seriously.

As part of its Celebrating Culture and Community Grants Program, Ford Motor Company is awarding \$250,000 this year to support nonprofit projects that reflect the unique culture and history of the neighborhoods surrounding Michigan Central Station.

The grants are tied to Ford's renovation of the 105-year-old train depot, which will be the centerpiece of a new innovation and mobility hub in Detroit, said Ford Company Fund spokeswoman Stafanie Dunham. As part of its commitment to the area, Ford is investing \$2 million over the next four years through the Community Benefits Agreement to support a variety of nonprofit projects aimed at bringing innovative programs and opportunities to residents in the communi-

Grant recipients were selected based on votes from a panel of judges, as well as approximately 200 local residents and community leaders who attended a special pitch session in late May.

"We want to thank everyone who submitted creative and thoughtful ideas for celebrating the vibrant culture of our neighborhoods," said Pamela Alexander. director. Community Development, Ford Motor Company Fund. "With help from the community, we determined these four proposals represent a diversity of talent and topics. We look forward to seeing the positive impact they will have in the neighborhoods surrounding Michigan

Ford is taking its responsibili- Central Station for years to come."

- The grantees are:
- S.A.Y. Detroit/Capturing Belief, \$85,000 - Build a visual history of the community and mentoring young residents in photography and creative writing.
- Heritage Works, \$75,000 -Activate community spaces with music, movement, visual and spoken word artists in green spaces, non-traditional venues, existing events and schools.
- Matrix Theatre Company,

\$55,000 - Record first-person accounts, oral histories and cultural perspectives of the rich diversity of people living in the area.

Motor City Street Dance Academy, \$35,000 - Engage community members via hip-hop and empower them with the S.E.E.D. Program (Spreading the Elements Everywhere in Detroit).

Grant recipients are expected to complete their projects in 2020. Topics for future grants may include streetscapes and neighborhood beautification; entrepreneurship and job creation; mobility and innovation.

With phase two of the renovation work underway, Michigan Central Station is on its way to becoming a base for thousands of entrepreneurs, innovators, designers, technologists and Ford employees to come together to solve the world's mobility problems. It will host a mix of office, retail, entertainment, food and hospitality spaces.

Ford expects the renovated train station to be ready for tenants and open to the public once again in 2022.



The Motor City Dance Academy, seen performing here, is getting at \$35,000 community grant from Ford.

For Fun Driving, Younger Buyers Pick Top OEMs Autos

(AP) - Ronald Montoya of Edmunds recently analyzed the demand for some vehicles by younger car buyers.

"You're likely familiar with the stereotype of a middle-aged person who impulsively splurges on an expensive new car," Montoya said. "But there's also a similar experience at a different life stage: buying a flashy and fun vehicle right after you get your first wellpaying job. You might call it a quarter-life crisis car.'

Most financial experts would argue that the last thing these young people need right now is a big loan, Montoya said. But if you've got some disposable income, and don't want to wait until vour 40s or 50s to drive a fun car, Edmunds has picked out six vehicles under \$30,000 that deliver driving excitement without breaking the bank. All of the listed manufacturer suggested retail prices (MSRP) include destination fees.

2019 FORD MUSTANG

The Mustang has long provided

dard with a surprising amount of racy hardware, including a limited-slip rear differential for improved traction and an electronic line-lock to facilitate burnouts (at the track only, of course).

Mustang EcoBoost starting MSRP: \$27,490.

2019 HONDA CIVIC

Honda offers a variety of Civic models, but the Si is the one that will get you through a quarter-life crisis. Available as a coupe or sedan, the Si comes with a 205horsepower engine that provides quick acceleration. A lot of the eniovment also comes from shifting your gears via the standard sixspeed manual transmission. Compared to a regular Civic, you also get an adaptive suspension that enhances both handling and ride comfort, stronger brakes, a unique rear spoiler, Si-branded sport seats, an upgraded 10speaker stereo, and a unique instrument panel.

Civic Si sedan starting MSRP: \$25,220.

thanks to its sporty handling. On top of that, you get a lot for your money. Even a base Kona comes with a decent set of features, including a 7-inch touchscreen with Apple CarPlay and Android Auto smartphone integration. Our pick, the Limited, has the upgraded engine plus extras such as leather upholstery and a premium sound system.

Kona Limited starting MSRP: \$26,595.

2019 JEEP WRANGLER

Here's what you don't get with the Wrangler: a quiet cabin, a cushy ride quality and lots of standard features. But it's easy to overlook that when you're getting iconic styling and an SUV that can be a capable off-roader or a rugged-looking boulevard cruiser. It's still the only SUV available that has a removable roof and doors, too. The base Sport trim fits under our \$30K limit, but it's missing features you might expect from a vehicle made in 2019,

so fun to drive around turns frills. You won't find expansive elbow room, high-tech features or generous trunk space here. But the Miata's small size and nimble handling contributes to the fun. Its simple fabric top that can be lowered in just a few seconds. A bevy of upgrades for 2019 makes the Miata enticing, including a revised 181-horsepower engine that gives the Miata quick acceleration.

> Miata Sport starting MSRP: \$26,650.

2019 VW GOLF GTI

The Golf GTI blends a userfriendly interior, practicality and performance for an attainable price. VW's formula is to take the humble Golf hatchback and transform it with a more powerful engine (228 horsepower for 2019), a sport-tuned suspension, upgraded brakes, and subtle enhancements such as bigger wheels and sport seats. Golf GTI Rabbit starting MSRP: \$29,790.

Montoya said it's OK to splurge a little and replace your old handme-down car with a new ride. The cars on this list should help keep your budget intact. Additionally, many of our picks are available used and are within the same vehicle generation, which means that you'll retain all the features of their new counterparts but for far less money.

PONTIAC, Mich. (AP) - A suburban Detroit man who was in the middle of a divorce when he won more than \$30 million must share the lottery windfall with his ex-wife.

The Michigan appeals court says a marriage isn't over until it's over. It means Mary Beth Zelasko can keep \$15 million awarded by an arbitrator, although she and Rich Zelasko had been separated for two years when he bought the Mega Millions ticket in 2013. Their divorce wasn't final until 2018.

In a court filing, an attorney for Rich Zelasko said, "Rich was lucky, but it was his luck, not Mary's, that produced the lottery proceeds." But arbitrator John Mills said the ticket was marital property. The couple had agreed to have Mills make certain decisions during the divorce case.

The appeals court last week found no errors.

sleek styling. What you might not

know is how good the rest of the car has gotten recently. Despite representing the bottom rung of Mustangdom, the EcoBoost is powered by a turbocharged fourcylinder engine that makes a stout 310 horsepower. This entrylevel Mustang also comes stan-

2019 HYUNDAI KONA

The Kona is one of the best subcompact crossover SUVs on the market. When equipped with its optional 175-horsepower turbocharged engine, it gets up to speed quicker than just about everything else in the class. It's al-

such as air conditioning. You'll need to spend a little more to get them.

Wrangler Two-Door Sport starting MSRP: \$29,540.

2019 MAZDA MX-5 Miata

The Miata is a two-seat roadster that prioritizes thrills over



2019 Ford Mustang

2019 Jeep Wrangler

Waymo, Renault and Nissan Enter Into AV Alliance

by MICHAEL LIEDTKE AP Technology Writer

SAN FRANCISCO (AP) – Selfdriving car pioneer Waymo is teaming up with automakers Renault and Nissan to make its first journey outside the U.S. with a ride-hailing service that will dispatch a fleet of robotaxis in France and Japan.

The partnership announced June 19 underscores Waymo's ambition to deploy its driverless technology throughout the world in an attempt to revolutionize the way people get around.

The Mountain View, Calif., company can afford to try because it's backed by one of the world's richest companies, Google, which secretly began working on driverless technology a decade ago before spinning off that project into what is now known as Waymo.

After launching its ride-hailing service in France and Japan, Waymo intends to explore the possibility of operating in other European and Asian markets with Renault and Nissan.

"This is an ideal opportunity for Waymo to bring our autonomous technology to a global stage," Waymo CEO John Krafcik said.

Waymo, Renault and Nissan didn't set a timetable for when their ride-hailing service will ready to be launched and be available to the public as a regular service. They left most other details vague.

It seems likely it will still be several years before Waymo will be in a position to be able to pose a serious challenge to Uber, the world's largest ride-hailing service.

Although Waymo's self-driving

technology is widely considered to be the world's most advanced, it still isn't adept enough to be trusted without a human poised to take control in case something goes awry with the robot.

Waymo had hoped to launch a fully autonomous ride-hailing service last year in the Phoenix area, but instead is still keeping human safety drivers in those vehicles more than six months after it rolled out.

That service, known as Waymo One, is still only offering rides to a few hundred passengers that previously participated in a test program.

Krafcik told the German newspaper Handelsblatt last year that Waymo will likely use a different brand of motor vehicle for its ride-hailing services outside the United States.

That could be one reason Waymo is working with France-based Renault and Japan-based Nissan, household names in their home countries.

Waymo has previously struck deals with two other automakers – Fiat Chrysler Automobiles and Jaguar – but those involved ordering tens of thousands of vehicles to be equipped with self-driving technology for services in the U.S.

So far, Waymo is only using Fiat Chrysler Automobile minivans for the company's Phoenix-area service.

The partnership with Renault and Nissan also involves a longtime alliance they formed with Mitsubishi. But the fate of that alliance has been in limbo since Carlos Ghosn, the former CEO of both Renault and Nissan, was arrested late last year on charges that included falsifying financial reports. It's a matter of science.

FCA US vehicles earned four awards from the Automotive Science Group (ASG) in their 2019 Automotive Performance Index (API) study.

The 2019 Chrysler Pacifica Hybrid continues to be a leader in its class, taking home two awards for the third consecutive year: Best All-around Performance and Best Environmental Performance. The 2019 Jeep Compass and 2019 Fiat 500L won the Economic Performance Award in their respective segments. said FCA spokeswoman Claire Carroll.

In ASG's data-driven automotive assessment, the Pacifica Hybrid outperformed all minivan variants in its competitive segment, said Colby Self, managing director at ASG. The Pacifica Hybrid also earned a class-leading environmental performance rating, outperforming the average vehicle in its segment by 34 percent, thereby producing 34 percent less CO2-e emissions over the first 6.5 years in its life cycle.

"The Chrysler Pacifica Hybrid furthers FCA's position in the ASG 2019 study with its 32-mile all-electric range and advanced gas-electric combination that not only reduces emissions, but also significantly reduces fuel costs by leveraging the increasingly cleaner U.S. power grid as a fuel source," said Self. "The plug-in remains unrivaled in the minivan segment, providing the best allaround performance in its class since the model was first introduced in 2017."

The 2019 Jeep Compass, with its best-in-class retail price, combined with its competitive fuel economy rating, outperformed 235 crossover variants in its competitive class, Self said. The Jeep Compass continues to hold the lowest cost of ownership when considering purchase and operating costs across the first 6.5 years of vehicle ownership.

FCA Vehicles Tops in ASG Performance

Similarly, ASG awarded the Fiat 500L the Best Economic Performance award.

The 500L is not only the lowest priced vehicle in the wagon class, but also the 500L takes advantage of vehicle light-weighting strategies that maximize operational efficiency, coming in as the lightest vehicle architecture, Self said.

"The Jeep Compass and Fiat 500L both stand out in ASG's 2019 study for their best-in-class economic performance, with both models providing the best value in their competitive segments," said Self. "In fact, the Compass has held this title for three consecutive years, while the 500L maintains its best value proposition for the second year running."

The Automotive Science Group is a research group founded by Eco-innovations, LLC, an environmental policy consultancy entity that was established in 2007. Self said.

ASG is changing the way we define value in today's automotive marketplace by providing life-cycle data-driven findings that help consumers make purchasing decisions that are ecologically sustainable, socially equitable and economically viable," Self said.



²⁰¹⁹ Jeep Compass

VW Employees Reject UAW

CHATTANOOGA, Tenn. (AP) – Workers at Volkswagen's plant in Chattanooga, Tennessee, voted June 14 against forming a factory-wide union, handing a setback to the UAW's efforts to gain a foothold among foreign auto facilities in the South.

The vote of hourly workers began June 12 and concluded June 14. Preliminary results show 833 employees voted against representation and 776 voted for it, the German automaker said in a statement. VW said about 93 percent of the roughly 1,700 eligible employees voted.

"Our employees have spoken," Frank Fischer, president and CEO of Volkswagen Chattanooga, said in the company statement.

He said results are pending certification by the National Labor Relations Board and legal review. Fischer said the company looks forward to "continuing our close cooperation with elected officials and business leaders in Tennessee."

Volkswagen has union representation at all of its other major plants worldwide.

A win in Chattanooga would have offered the United Auto Workers its first fully organized, foreign-owned auto assembly plant in the traditionally antiunion South. UAW officials have questioned why Chattanooga should differ from Volkswagen's other union-represented plants worldwide, or Spring Hill, Tennessee's General Motors plant with 3,000 UAW-represented workers. UAW organizing director Tracy Romero said she was proud of the pro-union voters at the plant. The company ran a brutal campaign of fear and misinformation," Romero said in a statement, adding that the automaker tried to make workers afraid of losing the plant and suffer other repercussions. Tennessee Gov. Bill Lee, U.S. Sen. Marsha Blackburn and other top Republicans urged a "no" vote, saving a union could cause economic harm. Blackburn said attempts to unionize will harm workers, adding, "We don't need union bosses in Detroit telling Tennessee what's best for our workers.'

VW employees in a closed-door meeting that he believes "when I have a direct relationship with you, the worker, and you're working for me, that is when the environment works the best," according to a recording obtained by Labor Notes, a pro-union publication.

In 2014, Volkswagen workers in Chattanooga voted 712-626 against unionization through the Detroit-based UAW, heeding the advice of then-U.S. Sen. Bob Corker, then-Gov. Bill Haslam and other GOP officials who urged a "no" vote.

During that election, Corker waited until voting had actually started at the plant in his hometown when he all but guaranteed that the company would announce within two weeks of a union rejection that it would build a new midsized SUV at its only U.S. factory, instead of sending the work to Mexico.

Volkswagen announced a new SUV would be produced in Chattanooga five months after the vote, essentially confirming Corker's prediction but on a different timeline.

UAW claimed "interference by politicians and outside special interest groups" swayed the 2014 election. The union ultimately dropped an appeal of that vote After the loss, a smaller bloc of Chattanooga workers voted for union representation in 2015, but Volkswagen refused to bargain with them unless all hourly workers had a vote. Instead of dragging out the fight over the smaller group, the union was granted this week's vote. Other than the smaller vote at Chattanooga, the UAW has not fully organized a foreign-owned auto assembly plant in the South. A 2017 vote at the Nissan plant in Canton, Mississippi, failed by a wide margin . Even with recent losses at VW and Nissan, the UAW won't stop trying to organize assembly plants in the South owned by international automakers, said Kristin Dziczek, vice president of labor, industry and economics at the Center for Automotive Research, an industry think tank in Ann Arbor.

Catch the <u>Tech Center News</u> when you're on the go.



Advertising Rates contact Ad Dept	The second secon	
return to TOP OF PAGE		
SITE IS UPDATED ON THE WEEKEND FOR MONDAY, IN TIME FOR THE CURRENT BUSINESS WEEK.		
	TOP OF PAGE HE WEEKEND FOR MONDAY,	

Our classic tabloid format fits most of today's mobile device screen resolutions. The scrollable pdf is viewable on tablet or smartphone.

TechCenterNews.com

In April, Gov. Bill Lee drew cheers and jeers when he told

"It's never the end," she said before the vote. "Win or lose, it's hard to organize."





We'll Give You \$1000 OVER Kelley Blue Book for Your Trade-In... GUARANTEED!*

moranautomotive.com



DAVID BERCEL JR. dbercelir@moranautomotive.com

SHOWROOM HOURS:

Monday Tuesday Wednesday Thursday Friday

8:00 AM - 9:00 PM 8:00 AM - 6:00 PM 8:00 AM - 6:00 PM 8:00 AM - 9:00 PM 8:00 AM - 6:00 PM

(586) 791-1010

Clinton Township 35500 S. Gratiot Avenue... North of 15 Mile

Pictures may not represent actual sale vehicle. All applicable incentives including bonus cash, bonus tags, private offers, competitive brand, lease conquest and/or lease loyalty offers have been deducted from Sale Prices/Payments and are subject to change by the manufacturer without notice and are plus title, tax, plate, CVR fees and administrative fees (when applicable) and were valid at time of printing. Leases are 10,000 miles per year. GM Employee discount require except where noted. Disposition fee may be required at lease turn in. \$1000 over Kelley Blue Book offer is for 2007 – 2017 vehicles with clean Carfax minus reconditioning costs. No salvage or branded titles. Certain restrictions apply, see dealer for complete details on all incentives/offers. Sale ends 6/28/2019 @ 6:00PM.



Legislature **Debates Road Taxes**

LANSING, Mich. (AP) - Sales taxes collected at the gas pump would be shifted to road repairs under a budget plan approved June 13 by the Michigan House, where majority Republicans called it a first step in response to Democratic Gov. Gretchen Whitmer's call for higher fuel taxes to fix deteriorating transportation infrastructure.

GOP lawmakers said they structured their blueprint so schools and municipalities, which now get most of the sales tax on fuel, would be held harmless. But Democrats were skeptical, saying the spending bills would not do enough to improve the roads and ultimately would create new fiscal problems for education and local governments.

Michigan spends less per capita on transportation than many states but has fuel taxes that rank among the country's highest. That is because it assesses a sales tax on gasoline - which is rare - while the revenue primarily helps fund education and local governments.

"People expect when they pay at the pump that every penny paid in taxes at the pump is a penny that is going to go toward roads. That is what we just accomplished with this budget while funding our roads at a record level without raising taxes one cent," said Republican House Speaker Lee Chatfield.

The House action was the latest move in what appears likely to be a protracted budget process that that will extend into the summer months. Whitmer in March proposed her plan, including a 45-cents-a-gallon gasoline and diesel tax increase. while the GOP-led Senate passed its proposal in May. Her blueprint would eventually boost transportation spending by roughly \$2 billion annually, while the Senate proposal would spend an additional \$132 million earlier than planned.

Under the House budget, the state would gradually direct \$850 million more to roads a year - though Chatfield characterized it as a "first step" and said there will be further talks with Senate leadership and the Whitmer administration.

Democrats opposed the transportation budget, K-12 budget and other spending bills that were passed June 13. The measures would increase funding for schools and universities but less so than Whitmer wants. They also would cut public transit shifting the money to roads - reduce information technology spending across state government and not include water infrastructure improvements proposed by the governor.



Quicken Loans Settles Federal Suit

DETROIT (AP) - Quicken Loans has agreed to pay \$32.5 million to settle a lawsuit that accused the company of fraudulently sticking the government with bad mortgages.

The deal was disclosed June 14. and the case was dismissed by a Detroit federal judge.

The government had accused Quicken of cutting corners when verifying the income of certain borrowers. Quicken also was accused of seeking improper appraisals so it could make a larger mortgage.

The loans were insured by the Federal Housing Administration, which paid Quicken if a borrower defaulted.

Quicken denied the allegations.