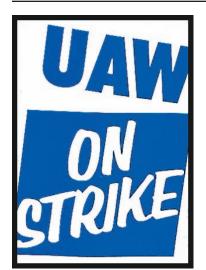
Tech Center News

WARREN, MICHIGAN

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UPDATE

Editor's note - the GM-UAW negotiations are an ongoing process. This is the latest information available at press time.

DETROIT (AP) – Zack Bazzi is not seeing workers from a nearby General Motors plant swing through the gas station where he works on Detroit's east side since they went on strike nearly a month ago.

Business is "slow," Bazzi said from behind the counter of the empty Marathon station within a short walk of the massive Detroit-Hamtramck assembly plant. "They come in usually in the morning and lunchtime. Now they're all on strike."

CONTINUED ON PAGE 2

2020 Stingray Hardtop Makes For Quieter Ride

The 2020 Corvette Stingray continues to be a car of firsts it's the first mid-engined Stingray - and it's also the first hardtop convertible.

Open-air driving has always been a part of the Chevrolet Corvette's heritage, said GM spokesman Kevin Kelly. In fact, when the Corvette debuted in 1953, it was available only as a convertible. The 2020 Chevrolet Corvette Stingray convertible builds off that heritage as the first hardtop and mid-engine convertible in Corvette history.

"We put the world on notice when we introduced the first mid-engine Chevrolet Corvette a few months ago, and now we're raising the bar with the first-ever hardtop Corvette convertible," said Brian Sweeney, Chevrolet U.S. vice president. "And the convertible will be priced only \$7,500 more than entry 1LT Stingray coupe."

The mid-engine 2020 Corvette Stingray was engineered first and foremost as a convertible, Sweeney said. The convertible maintains the tunnel-dominant structure and use of high-integrity die-cast parts found in the Stingray coupe.

The team engineered the hardtop to stow seamlessly into the body, maintaining the Stingray's ability to store two sets of golf clubs in the trunk even with the top down. The convertible also keeps the coupe's front storage compartment, which can fit an airline-spec carry-on and a laptop bag.

The hardtop provides a quieter cabin, increased security and a cleaner look compared to the previous softtop designs.

"Our goal from the beginning was to make sure customers didn't have to sacrifice any functionality, performance or comfort when choosing the hardtop convertible," said Josh Holder, Corvette program engineering manager. "We managed to keep the same design theme as the coupe, as well as the exceptional storage capacity and track capability.'

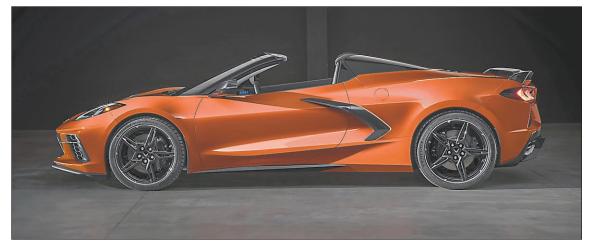
Like the coupe, the Stingray convertible's design was inspired by fighter jets, Sweeney said. The tonneau cover features aerodynamically shaped nacelles influenced by the housing used for jet engines. The nacelles, which were also used as inspiration on the Chevrolet Engineering Research Vehicle (CERV) I and II, as well as the Corvette SS and SR2 concepts, help reduce air recirculation into the cabin and provide a remarkably exotic profile with the top up or down. The tonneau also provides a rear

power-adjustable window and a vent for mid-engine cooling.

The two-piece top can be activated at speeds up to 30 mph and retract in as few as 16 seconds. It is powered by six electric motors - a Corvette first - and uses encoders for precise control, Seeney said. Switching to electric motors from hydraulic systems helps increase reliability. A body-colored roof is standard, while Carbon Flash metallic-painted nacelles and roof are optional.

Careful attention was paid to make sure the engine could

CONTINUED ON PAGE 2



In addition to being a mid-engine vehicle, the new Corvette Stingray sports a hard-top convertible design.



As this picture proves, autonomous brake technology still needs work.

AAA: Drivers Need to Pay Attention Even with Autonomous Brakes

New research from AAA re- pedestrians lose their lives each veals that automatic emergency year, accounting for 16 percent braking systems with pedestrian of all traffic deaths, a percentage detection perform inconsistently, and proved to be completely ineffective at night. An alarming result, considering 75 percent of pedestrian fatalities occur after dark, said AAA spokeswoman Adrienne Woodland. The systems were also challenged by real-world situations, like a vehicle turning right into the path of an adult. AAA's testing found that in this simulated scenario, the systems did not react at all, colliding with the adult are pedestrian target every time. For the safety of everyone on the road, AAA supports the continued development of pedestrian detection systems, specifically when it comes to improving functionality at night and in circumstances where drivers are most likely to encounter pedestrians.

NADA Head Supports New USMCA Trade Bill

by Jim Stickford

National Automobile Dealers Association (NADA) 2019 Chairman Charlie Gilchrist announced the organization's support for the United States-Mexico-Canada Agreement (USMCA) at the Automotive Press Association luncheon in Detroit

Gilchrist is the new chairman of NADA and owns and operates several new-car dealerships in Texas, including ones from Ford and General Motors.

"Congress should pass USMCA to preserve competition in the auto industry, and to enable dealers to continue providing affordable vehicles to millions of Americans without interruption – and they should do so expeditiously," said Gilchrist.

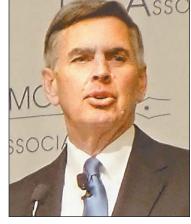
In urging passage of USMCA, Gilchrist said the global nature of auto manufacturing and the integrated supply chains that have

arisen from favorable trading relationships between the U.S. and partners in international its trade.

NAFTA has greatly enhanced the global competitiveness of the U.S. auto industry, and this edge in competitiveness has allowed dealers to offer our customers more choices at better prices," Gilchrist said.

"We cannot escape, nor should we try to undo, the reality that the U.S. auto industry is built on a favorable trading relationship with our two biggest trading partners - Canada and Mexico."

If the USMCA is implemented, it will solidify a favorable trading relationship with Canada and Mexico and ensure the continuation of tariff-free exchanges of vehicles and auto parts across North America, the largest source of vehicles sold by U.S.



Charlie Gilchrist

ment that the President has negotiated will maintain auto production and distribution in North America. It will preserve the global competitiveness of the U.S. automotive industry. And it

On average, nearly 6.000 that has steadily grown since 2010.

"Pedestrian fatalities are on the rise, proving how important the safety impact of these systems could be when further developed," said Greg Brannon, AAA's director of Automotive Engineering and Industry Relations. "But, our research found that current systems are far from perfect and still require an engaged driver behind the wheel."

While time of day and location contributing factors to pedestrian fatalities, vehicle speed also plays a major role. Previous research from the AAA Foundation for Traffic Safety found that pedestrians are at greater risk for severe injury or death the faster a car is traveling at the time of impact.

"The U.S.-Mexico-Canada Agree-

2020 Stingray Coming to NASCAR Tracks

The new 2020 Corvette Stingray, the first to feature a mid-engine design, is fast, and Chevrolet aims to prove that fact on the race track.

More than 60 years of racing heritage helped set the stage for the most important debut in Corvette's racing history on Oct. 2, as Chevy's first mid-engine GTLM race car - the Corvette C8.R - made its surprise debut alongside the 2020 Chevrolet Corvette Stingray convertible at the Kennedy Space Center, said GM spokesman Stefan Cross.

The C8.R and Corvette Stingray represent a true technology trans-



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The mid-engine 2020 Stingray design will be used for racing.

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STRIKE UPDATE

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"You're losing customers," he added, saying the striking workers are holding onto what money they have "to pay their bills."

As the United Auto Workers strike against the automaker churns through a fourth week, experts say lost wages means less spending.

The strike already has cost the state millions of dollars in tax revenue

Nationally, 49,000 UAW members have walked off their jobs at GM. With nearly 18,000 of those in Michigan, Democratic Gov. Gretchen Whitmer last week raised concerns about the state's economy as the strike impact spreads to the automobile supply chain.

With all GM employees in Michigan on strike, state withholding taxes are anticipated to be down by \$1.5 million to \$2 million each week, Michigan Treasury Department spokesman Ron Leix said.

"If the strike lasts more than a couple weeks and employees are not compensated, the total withholding decline - direct, indirect and induced impacts - would be estimated to increase to \$3.5-\$4.6 million per week," Leix wrote in an email.

"The hit to the broader Michigan economy could dampen sales tax, but historically these strikes have not caused a noticeable impact in tax collections," Leix said.

Michigan's monthly target statewide total for withholding in October is about \$800 million.

The state's economy is not nearly as dependent on the auto industry as it once was, but it's still a significant sector.

Last year, manufacturing jobs accounted for about 14 percent of Michigan's employment behind 15.4 percent in education and health services, and 15 percent in professional and business services sectors, according to the state's Bureau of Labor

Ford's Using Ann Arbor as Mobility Study City Ford is looking at some of its

latest mobility ideas close to home, in this case Ann Arbor.

"A bustling city's transportation system can often seem chaotic, especially with more than half of the world's population moving to urban areas and new mobility services jockeying for space," said Brett Wheatley, v.p., Mobility Marketing and Growth, Ford. "But as Ford CEO Jim Hackett outlined at last year's Consumer Electronics Show, our vehicles and other forms of mobility don't exist independently of each other. In fact, they have broad impact on our communities, cities and the world.'

That's why Ford is working with cities to help transform people's lives in profound ways, Wheatley said. This includes exploring how autonomous technology can be part of an urban transportation network and weaving together different transit operations to create a better system for all. But it also means developing tools that help cities easily visualize and understand their entire transportation system so they can make better decisions for their communities.

"This was the intention behind our collaboration with the city of Ann Arbor to pilot our Ford City Insights Platform," Wheatley said. "This suite of advanced software tools allows cities to explore and help solve a variety of mobility issues in a dynamic way not offered before. Today, following successful tests with Ann Arbor, we are expanding the use of these tools to six more U.S. cities, including Austin, Texas; Indianapolis, Pittsburgh and Detroit.

By leveraging parking, transit, traffic, safety and census data, the City Insights Platform allows city planners to visualize their entire mobility ecosystem and helps them explore various solutions before implementing them in the real world.

"Weaving together all the data that's needed to make a platform like this possible isn't easy, which is why collaboration is so important, Wheatley said. "We teamed up with the Ann Arbor Area Transportation Authority, the Downtown Development Authority and Ann Arbor SPARK, as well as the Michigan Economic Development Corporation and the University of Michigan Transportation Research Institute to help determine the best way to not only synchronize the data, but also ensure privacy is maintained every step of the way."

One of the first things Ann Arbor wanted to analyze was its parking infrastructure, wheatley said. Home to a large hospital system, a prominent university, and a bustling downtown that city data shows is growing by 11

percent every year, Ann Arbor officials naturally wanted to know if there were enough parking spots to accommodate all the traffic flowing through the city.

With the Ford City Insights Platform, Ann Arbor planners were able to get a comprehensive view of all city parking - data that previously was not available in one place - including cityand university-owned parking structures, as well as street-side parking spaces. They were able to visualize traffic flow during an average 24-hour period and easily see how parking was utilized whether people were interested in street parking, hunting for spots in various garages, or simply passing through downtown.

"Initially, it was thought the city needed more parking, but the analysis showed it would be better to find ways to inform drivers of openings and make access to be solved, but a less expensive one to be sure," Wheatley said. "You can just imagine how cities considering these types of bigbudget questions can improve their decision-making with this kind of analysis."

"Ann Arbor SPARK is pleased to have had the opportunity to bring together these partners to accomplish an incredible collaboration that broke down silos, set the foundation for future partnerships, and ultimately works to improve access and mobility in the city," said Komal Doshi, director, mobility pro-grams, Ann Arbor Spark. "This initiative provides us with a systems-based approach to accessing data driven insights, simulating and deploying mobility initiatives that will improve access in our community.'

The unique addition of con-

parking easier - still a challenge to nected vehicle data gives planners insight into driver behavior (aggregated and anonymized) such as where people are hitting the brakes harshly or accelerating unexpectedly - that could mark dangerous intersections or roads. Planners can use this additional insight to decide where to focus their efforts as they work to improve safety.

> The City Insights Platform also can be used to help improve the efficiency of city services. Ann Arbor officials tested this functionality by asking us to study their alleys, those secret pathways whose travelers can cause unintended consequences for the city. With delivery trucks, residents and pedestrians sharing the alleys with vehicles that provide city services, such as garbage trucks, it's easy to imagine accessibility becoming a problem.



Software tools allows cities like Ann Arbor to help solve mobility issues in ways not offered before.

2020 Hardtop Stingray Gives a Quieter Ride

CONTINUED FROM PAGE 1

breathe when stored underneath the tonneau cover. The sheetmolded composite top stows in a compartment made from lightweight composite panels and heat shields to manage heat from the engine.

A divider glass window in the middle of the vehicle can be power adjusted with the top up or down. The glass has been optimized to reduce air recirculation and wind noise in the cabin for improved quietness. The roof system design, combined with the same rear spoiler used on the Stingray coupe's Z51 Perform-

drag between the coupe and convertible with the top up.

Engineers tweaked the chassis for the convertible, with springs and dampers tuned specifically to provide nearly the same performance as the coupe.

Like the Stingray coupe, the convertible is powered by the next-generation 6.2L Small Block V8 LT2 engine, the only naturally aspirated V8 in the segment. It will produce 495 horsepower and 470 lb-ft of torque when equipped with performance exhaust.

When combined, the advanced propulsion system, revised chas-

ance Package, results in identical sis tuning and retractable hardtop make the 2020 Stingray the most no-compromise Corvette convertible in history, Sweeney said.

Interested Stingray shoppers can now build and price their own Corvette coupe or convertible on the 2020 Corvette visualizer at Chevrolet.com.

The 2020 Chevrolet Corvette Stingray coupe goes into production at GM's Bowling Green Assembly in late 2019, with the convertible following in late firstguarter 2020. A right-hand drive version of the convertible will be available in select international markets at a later date.

statistics.

Anderson Economic Group, an East Lansing-based consulting firm that works with auto dealers and manufacturers, says GM had lost an estimated \$660 million in profits through Oct. 6, while employees lost more than \$412 million in direct lost wages from the strike.

"As long as the strike continues, it will diminish the purchasing power of the striking and laid-off workers in Michigan by millions of dollars per day," said Charles Ballard, an economics professor at Michigan State University.

"That's the most direct effect, but the indirect effects may ultimately be just as important. With diminished incomes, the affected workers will spend less. That means less money coming into local businesses.

The damage to the Michigan economy will continue to grow every day that the strike continues.'



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COVERS THE TECH CENTER AND THE IMMEDIATE AREA

PAGE 3

AAA: Drivers Still Need to Keep Eyes on Road With Autonomous Brakes

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For example, a pedestrian hit by a vehicle traveling at 20 mph has an 18 percent risk of severe injury or death. Increase that by just 10 mph to 30 mph and the risk more than doubles to 47 percent.

AAA's latest study found that speed impacted system performance as well, with results varying between testing performed at 20 mph and 30 mph.

In partnership with the Automobile Club of Southern California's Automotive Research Center, AAA evaluated the performance of four midsize sedans equipped with automatic emergency braking with pedestrian detection to determine the effectiveness of these systems. Testing was conducted on a closed course using simulated pedestrian targets for the following scenarios:

- An adult crossing in front of a vehicle traveling at 20 mph and 30 mph during the day and at 25 mph at night.
- A child darting out from between two parked cars in front of a vehicle traveling at 20 mph and 30 mph.
- A vehicle turning right onto an adjacent road with an adult crossing at the same time

• Two adults standing along the side of the road with their backs to traffic, with a vehicle approaching at 20 mph and 30 mph.

Overall, the systems performed best in the instance of the adult crossing in front of a vehicle traveling at 20 mph during the day. In this case, the systems avoided a collision 40 percent of the time. But, at the higher speed of 30 mph, most systems failed to avoid a collision with the simulated pedestrian target. The other scenarios proved to be more challenging for the systems:

When encountering a child darting from between two cars, with the vehicle traveling at 20 mph, a collision occurred 89 percent of the time.

Immediately following a right hand turn, all of the test vehicles collided with the adult pedestrian. When approaching two adults standing alongside the road, with the vehicle traveling at 20 mph, a collision occurred 80 percent of the time.

In general, the systems were ineffective in all scenarios where the vehicle was traveling at 30 mph. At night, none of the systems detected or reacted to the adult test pedestrian models.

"The rise in pedestrian deaths is a major concern and automakers are on the right path with the intent of these systems," continued Brannon. "Our goal with this testing is to identify where the gaps exist to help educate consumers and share these findings with manufacturers to work to improve their functionality."

New vehicle technology can alert drivers and assist in lessening the likelihood or severity of a crash - whether with another vehicle or even more importantly, a pedestrian. But, until these systems are proven to perform consistently – especially pedestrian detection systems - during the day and at night and in a range of situations, AAA recommends drivers always be alert of their immediate surroundings. Do not rely on pedestrian detection systems to prevent a crash. This technology should only serve as a backup and not a replacement for an engaged driver.

Read the owner's manual to understand what safety systems the vehicle has. Before leaving the lot, ask the dealer to explain how these systems work, including what safety system alerts sound and look like and what triggers their activation.

Use extra caution when driving at night since this is the riskiest time for pedestrians and where the systems struggled the most. Previous AAA research found that headlights, even in new condition, do not provide the amount of light needed for drivers to appropriately react to something or someone in the roadway.

It is a driver's responsibility to yield to pedestrians, but those traveling by foot should be diligent as well. Pedestrians should use caution by staying on sidewalks and using crosswalks as often as possible. Always obey traffic signals, look both ways before crossing the street and do not walk and text.

To assess the capabilities of pedestrian detection systems, AAA conducted primary research in partnership with the Automotive Club of Southern California's Automotive Research Center in Los Angeles. Testing was done on closed surface streets at the Auto Club Speedway in Fontana, Calif.

Four test vehicles were selected (2019 Chevy Malibu, 2019 Honda Accord, 2019 Tesla Model 3 and 2019 Toyota Camry) using specific criteria and each test vehicle was outfitted using industry-standard instrumentation, sensors and cameras to capture vehicle dynamics, position data and visual notifications from the pedestrian detection system. Three simulated pedestrian targets were used including two dynamic models and each were outfitted with industry-standard instrumentation to time movement as well as receive position, speed and acceleration from the dynamic target.



MCC Receives Homeland Security Designation

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The National Security Agency (NSA) and the Department of Homeland Security (DHS) designated Macomb Community College as a National Center of Academic Excellence in Cyber Defense 2-Year Education (CAE-CDE). Macomb is one of four Michigan community colleges that have earned the designation and among 100 institutions nationwide.

MCC's CAE-CDE designation is valid through June 2024, said Sean Patrick, manager of Media Relations at MCC. The NSA and the DHS jointly sponsor the National Centers of Academic Excellence in Cyber Defense program, which is designed to reduce vulnerability in the national information infrastructure by promoting higher education, research in cyber defense, and developing professionals with cyber defense expertise, Patrick

program is aligned with the criteria of the National Center of Academic Excellence in Cyber Defense, our graduates are prepared with a robust understanding of cyber defense technology and practices, positioning them in a career in this growing and important field.'

The CAE-CDE program is open to regionally accredited two-year community colleges, technical schools, state or federally endorsed cybersecurity training centers or United States government cybersecurity training centers.

Those institutions awarded the designation have met a set of rigorous criteria that ensures curriculum adheres to accepted and evolving practices in cybersecurity. With the CAE-CDE designation, MCC is eligible to apply for federal grants to grow and MCC's cybersecurity program, Corba said.

The designation will also be



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said

"This designation recognizes Macomb Community College's highly focused cybersecurity program," said Dave Corba, Technology, Macomb Communi-

noted on student transcripts showing they have received an education considered critical by the U.S. government.

Macomb's CAE-CDE designadean, Business and Information tion will be valid through June 2024.



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Wholesale Used Prices Drop in September

Wholesale used-vehicle prices (on a mix-, mileage-, and seasonally adjusted basis) decreased 1.04 percent month over month in September. This brought the Manheim Used Vehicle Value Index to 139.9, flat from a year ago and off the record high for the Index.

Weekly Manheim Market Report (MMR) prices showed increasing depreciation as September progressed.

The majority of the summer had low depreciation, before the accelerating depreciation pattern marked an abrupt shift in season, said Manheim spokesman Mark Schirmer. The weekly pattern last month most resembled the pattern from last October, when prices began to normalize following an abnormally strong summer and early fall.

Three-year-old vehicle values in aggregate were down 2.6 percent for the month, when prices normally decline by 1.5 percent. As a result of this higher depreciation, prices in aggregate in nonluxury ended lower than the beginning of the year for the first time since March.

On a year-over-year basis, major market segments saw weak

seasonally adjusted price gains in September. Luxury cars and vans outperformed the overall market. Most other major segments underperformed . Last year continues to be a tough comparison for both prices and sales as the industry experienced an abnormal increase in consumer demand driven by tariff fears and rising interest rates.

"While the new-vehicle market saw a big drop in volume in September, total used-vehicle sales volume was down only slightly," said Jonathan Smoke, chief economist. Cox Automotive. "However, in September, the Manheim Used Vehicle Value Index saw its worst month since January, ending flat year-over-year and negative month-over-month. This also was the worst September decline in 18 years. The question will be if this is an earlier seasonal shift, as we saw last October. or is this the start of a more rapid deceleration in used vehicle values tied to decreasing demand."

According to Cox Automotive estimates, total used-vehicle sales volume was down 0.1 percent year over year in September. Smoke said Cox estimates the September used seasonally adjusted annual rate (SAAR) to be 39.8 million, up from 39.7 million last September and flat from August's rate. The September used retail SAAR estimate is 20 million, up from 19.6 million last September and flat month over month.

September total new-vehicle sales, conversely, were down 11.3 percent year over year, with two fewer selling days compared to September 2018. Also, vehicle sales in September 2019 did not include the important Labor Day weekend, which was counted in last month's total. The September SAAR came in at 17.2 million, a decline from last year's 17.3 million and up from August's 17.0 million rate.

Strong fleet sales continue to support the new vehicle market. Combined rental, commercial and government purchases of new vehicles were down only 7.3 percent year over year in September.

The commercial fleet channel was particularly strong, up 18 percent year over year in September. Even with the highest average incentive in 21 months, retail sales of new vehicles were down 12 percent in September.

NADA Head Urges Passing USMCA Trade Proposal

CONTINUED FROM PAGE 1

will enable dealers to continue providing affordable vehicle options for American consumers," Gilchrist said.

And he stressed that approval of USMCA will also reduce the threat of any future tariffs on vehicles and parts by exempting two of the largest sources of vehicle and parts sold by franchised dealers in the U.S.

When asked why getting a new trade agreement for the auto industry was important, Gilchrist said it was time.

NAFTA was negotiated a quarter of a century ago, Gilchrist said. A lot has changed since that time. Things like how companies do business and the nature of auto industry. It's a good idea to have a trade agreement that reflects modern times and not the 1990s.

He added that the current auto trade agreement with China was negotiated at a time when the Chinese economy was in a very different state than today. Having a trade agreement that is based on today's economic realities just makes good sense.

Additionally, Congress passing USMCA gives OEMs and their suppliers must be confident in market stability in order to invest in new technology and new infrastructure.

Investing for five years or longer down the line can only happen when the rules are known, Gilchrist said. He said that today's automotive supply chain is not national, it's international. A 25 percent tariff on parts would be extremely disuptive. NADA estimates such a tariff would eliminate 117,000 jobs at dealerships and make cars more expensive for the buying public.

By having USMCA in place, OEMs and suppliers will know the rules, and they will have the stability needed for automakers to make vehicles in this country.

"We need to take advantage of the USMCA agreement. The USM-CA is win for us. Let's make it happen," Gilchrist said.

BorgWarner Hits Manufacturing Milestone

BorgWarner passed a major production milestone at its manufacturing facility in Changnyeong, South Korea, completing production of its 70 millionth starter on Aug. 1, 2019.

To celebrate this remarkable record, all employees came together for a one-day event after it was achieved, said BorgWarner spokeswoman Kathy Graham.

The 70 millionth starter was given to the employee who produced the first product ever in the Korean plant.

"We at BorgWarner are proud to achieve this goal as it shows the success of our starter technology. We combine state-of-theart technology and extensive engineering expertise with local production for our customers," said Dr. Stefan Demmerle, president, BorgWarner PowerDrive Systems. "We would like to thank our employees in Changnyeong. Without their dedication and the excellent work they have done during the past 22 years, this would not have been possible. Their commitment should enable us to reach the 100 million mark by 2029."

Mid-Engine Corvette Hits NASCAR Tracks

CONTINUED FROM PAGE 1

fer, taking lessons from the street straight to the track and vice versa.

"The C8.R is much more than just a race-tuned version of the 2020 Corvette Stingray. It's a culmination of many years of testing and development between GM Design, Propulsion, Engineering and the Corvette Racing team," said Jim Campbell, Chevrolet U.S. vice president of Performance and Motorsports. "The collaboration between these teams has allowed us to take these vehicles' performance to the next level, both on the street and the track."

With its tremendous success on the track over the last 20 years, Corvette Racing has helped push the development, performance and popularity of Corvette's top–line performance cars on race tracks across the world, Campbell said.

Since 1999, Corvette Racing has won 107 races – the most of any professional sports car team in North America – including 13 Team championships and 12 Driver and Manufacturer titles, Cross sad.

In 2015, Corvette Racing became the first sports car team in 15 years win endurance racing's Triple Crown – victories at Rolex 24 at Daytona, Twelve Hours of Sebring and 24 Hours of Le Mans – in the same season.

The C8.R No. 4 car donned a new silver livery, inspired by the color of iconic Corvette concepts

such as the 1973 Chevrolet Aerovette and the 1959 Corvette Stingray Racer, Cross said. This car also features yellow accents as part of its racing colors.

Complementing the No. 4 vehicle is the No. 3 car which feature sa traditional yellow color scheme with silver accents that continues the lineage of the successful GTLM racing Corvettes of the past 20 years.

The C8.R will make its racing debut at Rolex 24 at Daytona in January 2020.



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DTE, GM Work Together to Place Additional Charging Stations in Detroit

The energy at Detroit's Beacon troit and we look forward to fur-Park became even more electric when Project Kinetic, a unique collaboration between the public, private and philanthropic sectors, launched ChargeD in downtown Detroit.

The four ChargePoint DC fast charger stations, the first-oftheir-kind were deployed in the city in late September. They enable people to fast-charge their electric vehicles (EVs) while enjoying the park and learning about the benefits of EVs and mobility technologies, said project spokeswoman Dayana Rodriguez.

The project, led by DTE Energy with support from the City of Detroit, PlanetM, General Motors and Blue Energy, places downtown Detroit on the roadmap for EV technology and infrastructure deployment while continuing to position Michigan at the forefront of future mobility solutions, Rodriguez said.

DTE Energy and Blue Energy led the installation of the project, and General Motors brought four Chevrolet Bolts to demonstrate the company's commitment to an all-electric future. Two more chargers will be installed at Capitol Park, a public space programmed and managed by the Downtown Detroit Partnership.

As manager and facilitator of the ChargeD project, DTE Energy was responsible for providing the electrical infrastructure and upgrades for the fast chargers.

"DTE's accelerated path toward a clean energy future is well underway. We are excited to join our customers, partners and community stakeholders as we work together to reduce carbon emissions," said Camilo Serna, v.p. of Corporate Strategy, DTE Energy. "We are thrilled to lead the partnership effort to bring DC fast charging to the city of De-

2019 GMC ACADIA SLE-1

\$186* 24. S 999

ther deployment of EV charger infrastructure and bringing the benefits of EVs to our customers.

Blue Energy, a Corrigan Company that works with technology partner ChargePoint, is the owner/operator of the chargers, Rodriguez said. Blue Energy and DTE Energy will collect and analyze data for all four chargers.

"We're excited to expand our footprint in downtown Detroit with such an extraordinary group of companies and to work in collaboration with our partners to implement this project," said Mike Corrigan, president of Blue Energy.

The ChargeD initiative furthers the City of Detroit's downtown accessibility priority of improving traffic conditions and parking offerings for Detroit residents and visitors.

"Project Kinetic helped build a set of pilots for the City of Detroit that were informed by both Detroiters and the private sector. ChargeD will allow residents, employees and users to have access to fast charging technology, create an opportunity to educate the community about electric vehicles and understand what it will take to scale this program across Detroit. It also helps achieve goals concerning clean air, mobility, and the climate crisis, outlined in the recently released Detroit Sustainability Action Agenda," said Joel Howrani Heeres, director, Office of Sustainability, City of Detroit.

General Motors has a longstanding working relationship with the City of Detroit and sees the ChargeD initiative as an important step in providing fast, easy charging while educating the public about the benefits of EV ownership.

"General Motors is committed

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This EV charging station was recently placed in the downtown neighborhood of Beacon Park in Detroit.

to an all-electric future with zero emissions and cleaner air for all. The ChargeD initiative is a positive step forward to increasing the education and awareness of EVs and advancing EV infrastructure in Detroit. The new fast chargers in Beacon Park will help make owning a Chevrolet Bolt EV and other EVs more convenient than ever for people across Detroit," said Jordan Catrine, EV Charging & Infrastructure manager. General Motors.

PlanetM, the mobility-focused brand and business development program of the Michigan Economic Development Corporation, also played an instrumental role in the deployment of ChargeD.

"The ChargeD initiative showcases the opportunities that public-private collaborations bring to our communities," said Jeff Mason, CEO of the Michigan Economic Development Corporation. "By coming together, we're able to successfully identify, create and deploy mobility solutions that address transportation challenges statewide, strengthening Michigan's nationwide leadership in mobility."

ChargePoint worked closely with DTE on the initiative and collaborated with Blue Energy to deploy the right technology for ChargeD. Leveraging the company's fastcharge and software solutions, Blue Energy owns and will operate the ChargePoint Express 250 fast chargers in Downtown Detroit as part of the project.

NextEnergy and the Downtown Detroit Partnership have also teamed up to develop strategy and planning for educating consumers, businesses and communities about the benefits of EVs via multi-year programming. Support for the ongoing education and programming at Capitol Park is provided by grants from the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and the Michigan Economic Development Corporation/PlanetM.

Formed in January 2018, Project Kinetic is a unique collaboration between the public (City of Detroit, Michigan Economic Development Corporation/PlanetM), private (General Motors, Lear, DTE Energy, Quicken Loans Community Fund, Bedrock Detroit, Boston Consulting Group) and philanthropy sectors with a common goal of identifying and deploying innovative solutions for the toughest mobility challenges facing Detroit, Rodriguez said.

ChargeD is one of five Project Kinetic pilot programs, and the second to launch in the city. The first, Car4You, which provides low-cost vehicle access by the hour in Detroit's Osborne neighborhood, launched in August 2019, Rodriguez said.





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Auto Manufacturers Using More LED Systems in Cars

In the LED lighting industry, automotive industry, having relarge businesses in the commercial and industrial sectors were hesitant to integrate the technology at scale in their operations, said Charles J. Sayegh, Media Relations coordinator for ThinkLite, LLC.

had over a decade's worth of maturation and refinement, two of the auto industry's leading manufacturers are continuing their large-scale installation projects, Sayegh said.

In 2014, Ford invested in a \$25M LED retrofit project aimed at manufacturing facilities in the US and worldwide, resulting in an annual energy savings of 56 million kilowatt-hours - enough electricity to power 6,000 average-sized homes every year. Similarly, GM is enjoying a 60 percent reduction in costs over 32 project sites. Between them both, the savings is nearly \$10 million annually, Sayegh said.

ThinkLite LLC, a LED lighting manufacturer, has serviced the automotive industry for nearly a decade. ThinkLite has seen an uptick in the number of RFPs for commercial and retail installations in the last year, a number they think is only going to rise.

Since 2018, we have experienced an increase in market demand by over 25 percent. Corporations, property managers, and manufacturing facilities, now understand the real-world cost savings, light quality improvement, and simplified maintenance afforded by our LED solutions," says Danny Wadhwani, COO-CFO of ThinkLite. "State and Federal energy incentives, paired with efficient lighting, allows for a positive ROI in as little as 15 months."

ThinkLite is well-known in the

cently come off a NASCAR win at The Magic Mile in Loudon, NH in September. The #36 ThinkLite car was driven to Victory Lane by Bobby Santos III, leaving Mr. Wadhwani very pleased:

"We love the opportunity to Now that LED technology has bring attention to the enormous financial and environmental impacts of LED lighting. Our NASCAR sponsorship this year and the impressive efforts by the #36 team have helped our mission to bring this technology deeper into the automotive industry. Now that the big auto makers are on board, the next step is to integrate the secondary and downstream suppliers as well.'

> Based on a Center for Automotive Research report, there are 975 auto industry related manufacturing plants and over 63,000 auto parts stores nationwide so the financial and ecological impacts would be substantial.

> Wadhwani expects that businesses who service the automotive industry will be next to adopt the technology, with dealerships, auto parts stores, repair and tire shop franchises topping the list. Corporations with locations in the dozens, or even hundreds, stand to benefit tremendously from the savings.

> ThinkLite has a global footprint in 14 countries and is the only LED manufacturer that delivers the full 'Manufacture to Installation' value chain. Some consider them the Tesla of lighting. They manufacture proprietary LED technologies, are a national utility incentive expert, provide turn-key installations, and act as the onsite project manager. This end to end capability is a customer journey that very few can provide, Sayegh said.



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