Tech Center News

WARREN, MICHIGAN

VOL. 39 NO. 9

NOVEMBER 3, 2014

Barra Talks Industry Change, **Technology** Advancements

Earning customers for life is and 4G LTE, to name but a few. how GM intends to "compete and win," said General Motors CEO Mary Barra last week.

In an address to a Detroit Economic Club gathering Oct. 28, Barra talked about change in the auto industry.

"In the 100-years-plus since the auto industry sprang up in our community, there have been many transitional periods," she said. "I believe we are in one of those periods again.

"In fact, I believe this industry will experience more dramatic change in the next decade than it has in the past 50 years. Given what we have all witnessed in just the last few years, this is a bold prediction, I know. But it can be unbelievably exciting as well.

She said GM is energized by this prospect, adding that the potential benefits for all who call Detroit home are enormous, including dealers, suppliers and unions.

"Look at the forces of change sweeping through the automotive sector," Barra said. "Technology advancements are revolutionizing the industry. New propulsion systems, alternative fuel sources, lighter and stronger materials, self-driving vehicles

"Rapidly growing markets in Asia are causing every company to rethink its business plans. New competitors are emerging, including some in Silicon Valley.'

Underlying each of these areas of change, she said, is the evolving nature of consumer expectations. What consumers want and expect from cars and trucks and crossovers, she added, is undergoing a revolution.

Barra said that if GM is successful in meeting the public's expectations, "we will earn customers for life. This is how we intend to compete and win. By getting closer to the customer than any other auto manufacturer.

"As I stand here today, GM is a company with many strengths, but I also know we must improve significantly and rapidly. These are the facts. Complacency and overconfidence have no place in the global automotive industry and no place at our company."

Since 2009, GM has announced more than \$11 billion in investments in the U.S., with almost half being committed to Michigan.

"And I'm pleased to announce today that GM will make an additional investment of nearly \$300 million in this region before the



Mary Barra

end of the year," Barra said.

"These investments lead to quality jobs. In fact, we have worked with our UAW partners to develop initiatives that will lead to more than 22,600 jobs in the United States.

"Hiring has begun for many of the positions and will continue over the next few years, and many of these jobs will be based right here in Michigan.'

She said GM doesn't invest in this region or create jobs here out of nostalgia or misplaced sentimentality, adding that what matters in this industry is excellence, value and world-class skills.

"In the next two years," she said, "we are going to start connecting cars to each other, and

CONTINUED ON PAGE 3

Volt Electric Drive Moves To Warren Transmission

DETROIT (AP) - General Mo- be able to go on battery power tors is moving production of the Chevrolet Volt's electric drive unit from Mexico to the Warren Transmission Plant as it updates the slow-selling car to increase its electric range and make it perform better.

The Volt can go about 38 miles on battery power before a small gasoline generator kicks in. In the revamped version, coming in the second half of next year, the battery will store more energy, yet be smaller, allowing the car to go farther on battery power, CEO Mary Barra said in a speech delivered at the Detroit Economic Club Oct. 28.

Moving the electric drive from Ramos Arzipe, Mexico, to the Warren plant means that all of the Volt's main components – the electric drive unit, battery pack and gasoline generator - will be made in the U.S. starting next year. An electric drive unit powers the Volt's wheels.

GM won't hire any new workers to make the drive system.

Barra also announced that GM will invest another \$300 million in southeast Michigan factories before the end of this year, but she gave no details.

She also did not say how far the second-generation Volt will

alone, but said it will be a "significant leap forward" in technology from the current version. The new car, she said, will ac-

celerate faster than the old one and have a more efficient gas generator than the current 1.4liter, four-cylinder engine. GM announced last year that it would build a new 1.5-liter four-cylinder engine for the Volt at a factory in Flint.

In the speech, Barra conceded the Volt's 70,000 in sales since 2010 did not reach expectations. "The scorecard on the first-generation Volt is good, but not everything we wanted," she said. "We have learned so much, including that breakthrough technology doesn't always advance in a straight line.'

Through September, GM has sold 14,540 Volts, down more than 13 percent from a year ago as gas prices have slipped downward to around \$3 per gallon.

Barra also said GM still has to improve significantly and quickly, and she's becoming impatient since taking over the company in January. Shortly after she started in the top job, GM went through the largest recall crisis in its history, calling back more than 30 million vehicles so far this year.

Buick Reaches Consumer Reports' Top Ten

by Jim Stickford

Infotainment systems are dragging down owners' perception of quality in late-model cars, according to recent research.

Multi-function, cross-linked infotainment systems and the associated in-car electronics are a growing reliability plague for many brands, according to the Consumer Reports 2014 Annual Reliability Survey.

That was the message given by Jake Fisher, head of Consumer Reports' auto testing, at a presentation before the Automotive Press Association at the Detroit Athletic Club Oct. 27.

Fisher told the crowd of re- By TOM KRISHER porters that first-year models from Infiniti, Jeep, Fiat, Ram, Cadillac, Ford, and Honda have all seen significant problem rates from infotainment bugs and

models than any other category.

The common issues from past CR surveys, Fisher said, included unresponsive touch screens, or a reluctance to pair phones. While those issues remain, this year's survey finds they have been joined by other problems - including multi-use controllers that don't function properly.

The Consumer Reports 2015 new car reliability rankings saw Lexus repeat as the most reliable brand in the U.S. market, Fisher said

"Infotainment system problems generally don't exist in a vacuum," said Fisher. "A close look at the results suggests that cars with a lot of in-car electronic issues usually have plenty of other troubles, too.'

Consumer Reports Annual Auto Reliability Survey polls CR's subscribers, who indicate any serious problems in 17 trouble areas that they have had with the cars they own in the preceding 12 months.

Reports gathers Consumer



2014 Buick Verano

enough data on 248 models to spot trends. The survey is the largest of its kind - the 2014 edition generated information

CONTINUED ON PAGE 2

Chernoby, Liddane Replace Betts as FCA's Quality Chief

AP Auto Writer

DETROIT (AP) - Doug Betts, Fiat Chrysler's longtime quality chief, abruptly left the company Oct. 28, one day after its brands performed poorly in Consumer Reports magazine's annual reliability rankings. Fiat Chrysler said in a state- president of quality, joined ment that Betts, who has been Chrysler in November of 2007 af-

with Chrysler for the past seven years, exited the company to pursue other interests.

He was immediately replaced by Mark Chernoby, who will head quality for the global company,

ter more than 21 years of quality experience at Nissan, Toyota, Michelin and General Motors.

predict which new cars will likely

be reliable or troublesome, as

well as provide insights and

standings of major brands and

But he had trouble fixing the company's longstanding shown little patience with execuquality problems, and it con-

between Betts' departure and the rankings.

Sergio Marchionne, CEO of the newly merged company, has tives whose performances fall

glitches.

Of the 17 problem areas CR asks about in its survey, the category including in-car electronics generated more complaints from owners of 2014 and Matthew Liddane, who will lead Chrysler Group quality in North America.

Betts, who was senior vice

tinually fared poorly in the influential Consumer Reports rankings

Company Shawn Morgan would not comment on any possible connection

short of expectations. He's often changed his top managers since taking control of the company afspokeswoman ter it emerged from a U.S. govern-

CONTINUED ON PAGE 2



Ford police vehicles will now have monitors that can help keep track of officers' driving habits.

Ford's Police Car Monitoring System Geared to Save Lives

Police departments now can police the police.

With Ford's new monitoring system, police agencies can better save lives, prevent injuries and potentially help save millions of taxpayer dollars.

As agents of law and order, police officers monitor driving behavior to ensure the safety of the motoring public, said Bill Frykman, Ford's manager of business and product development.

But until now, he said, unless investigators removed a police vehicle's black box and pulled the data after a traffic crash, no one has been able to monitor police vehicle operating conditions.

To help address this issue, Ford and Telogis have co-developed an industry-first telematics solution that builds on Ford's ex-

CONTINUED ON PAGE 4

Go to TechCenterNews.com for this week's edition

Buick Leads Domestics in Consumer Reports Ranking 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, news

Tech Center News is a trademark of Springer Publishing Co., Inc

www.TechCenterNews.com

Ford Recalling 200,000 Vehicles

Ford is issuing a safety recall for 204,448 2007-08 Ford Edge and Lincoln MKX vehicles in corrosion states and provinces in North America for possible corrosion under the reinforcement brackets where the fuel tank is mounted to the vehicle.

This condition may result in a fuel odor, fuel leak or potentially a check engine light, said Ford spokesperson Kelli Felker.

A fuel leak in the presence of an ignition source may result in a fire. Ford is aware of one fire that may be related to this condition. with no injuries and no accidents.

Affected vehicles include certain 2007-08 Ford Edge and Lincoln MKX vehicles built at Oakville Assembly from June 15, 2006, to Sept. 22, 2008. Ford is aware of 186,024 vehicles in the United States and federalized territories, and 18,424 vehicles in Canada.

Affected vehicles include those that are currently registered or were originally sold in 22 states (including Michigan) and parts of eastern Canada.

Dealers will inspect the fuel tank and either replace or repair it at no cost to the customer.

CONTINUED FROM PAGE 1

from about 1.1 million vehicles. The worst first-year infotainment offender in this year's survey was the Intouch system in the new Infiniti Q50 sedan. More than one in five owners reported a problem with it.

That, when combined with the poor reliability performance of the QX60 SUV, was enough to drop Infiniti's reliability rank 14 points to 20th overall - the farthest drop of any of the 28 brands this year.

The survey did show signs some carmakers are finding ways to alleviate infotainment problems. Fisher said.

While hardly trouble-free, updates and changes to Ford and Lincoln's MyTouch systems have made them less troublesome year after year.

When introduced, the 2011 Ford Explorer had a 10 percent infotainment complaint rate and peaked at 28 percent. The 2014 Explorer's revised system has a 3 percent complaint rate for the same trouble areas.

Buick was the only domestic brand to finish in the top 10, and moved into 6th place from 16th last year. All six of its models included in CR's annual survey scored average or better reliability, including the CR-Recommended Buick LaCrosse (V6).

"Buick's relatively high ranking is a big deal," said Mike Wall, director of Automotive Analysis for IHS. "It demonstrates a couple of things. First, infotainment issues are still a problem. Second, I noticed when I read through the report that consumers are demanding this technology and the automakers that can best execute it will fare better with the public.'

Wall said Buick has done a good job of creating vehicles that are of good quality but relatively inexpensive compared to other high-end vehicles.

Buick has really done a good job in terms of both quality and content of vehicles," Wall said. "Look at the Verano. It's a success and it's built off the Cruze platform. GM has been able to leverage off an existing platform to extend the Buick brand. That's how you draw in those muchrevered younger buyers.

"Brands like Buick are building smaller vehicles to bring the entry price to the brand down. The ones that are able to do that will win in the end. I think we'll be seeing a lot of that sort of thing in the future.

All of the other U.S. brands finished in the lower half of the brand rankings. Lincoln joined Hyundai and Cadillac as the brands that improved their rankings the most. This year, Lincoln moved up 12 spots, finishing in 15th place, with four models including the reliable MKZ sedan scoring average and only two models below average.

Domestic small and compact cars, and full-sized pickups aren't helping American carmakers to improve their reliability rank, Fisher said.

The Chevrolet Sonic and Cruze. Ford Fiesta and Focus, and the Dodge Dart turbo version are all below average.

The recently redesigned Chevrolet Silverado/GMC Sierra 1500 is showing a lot of teething pains. The GMC brand dropped 10 places, finishing 19th in the rankings largely because of the Sierra 1500 pickup. The Ram 1500 has also faltered, contributing to RAM's seven-place slide to 26th.



Betts Replaced as FCA's Quality Chief

CONTINUED FROM PAGE 1

ment-sponsored bankruptcy in 2009

But AutoTrader.com senior analyst Michelle Krebs said Marchionne had been more patient than usual with Betts. "It clearly sends the message that Chrysler management is not going to accept bad quality going forward," she said. "They need to do something. Yesterday's results were really dismal."

Fiat Chrysler Automobiles fared worst in the Consumer Reports rankings this year. The Dodge, Ram, Jeep and Fiat brands occupied the bottom four spots of 28 brands ranked by the magazine. Chrysler was the company's highest-ranked brand at No. 22. Jeep, Ram, Dodge and Chrysler all dropped from last year's rankings.

The new nine-speed transmission in the Jeep Cherokee was among the company's headaches.

The instability created by combining Chrysler with Fiat has not helped reliability, said Consumer *Reports*' head of auto testing Jake Fisher. "It's just this kind of moving target," Fisher said.

Chrysler's quality problems, though, can't be blamed solely on Betts, Krebs said. The company must fix engineering, design and manufacturing problems as well, she said.

BEAUTIFUL

ACREAGE

DEVELOPMENT

Chernoby, who now serves as FCA's head of product development, will keep that position in addition to his quality duties.

new compact car efforts.

Liddane, a longtime Chrysler engineer, previously was vice president of systems and components for Chrysler Group. He has served as chief engineer for Jeep products and led the company's



ASAP Auto Detailing

Interior/Exterior

Professional

Ask for MARK



Chrysler Recalls 600,000 2010-2014 Trucks and SUVs

Chrysler is recalling about that helps manage ESC. 600,000 vehicles in four separate campaigns involving fuel-heater housings and tire pressure.

In one campaign, Chrysler is recalling vehicles to take care of potential problems with wiringharness terminals and to upgrade software that helps manage Electronic Stability Control (ESC).

The recall covers an estimated 381,876 trucks globally to upgrade certain wiring-harness terminals and replace – if necessary their fuel-heater housings.

Restricted to vehicles equipped with 6.7-liter Cummins diesel engines, the campaign fol-

Following an investigation prompted by field data, Chrysler engineers discovered a debris cover protecting a certain circuit board may inadvertently disrupt a communication line and disable ESC, Mayne said.

The company is unaware of any related injuries or accidents in either of these cases.

The software upgrade restores proper communication and preserves ESC function.

This campaign covers certain model-year 2014 Dodge Durango and Jeep Grand Cherokee SUVs. An estimated 132,223 are in the U.S.; 8,871 are in Canada; 4,742 in Mexico and 38,350 outside the NAFTA region. In a third campaign, the automaker is recalling an estimated 23,053 Ram ProMaster full-size vans from model-year 2014. All are in the U.S. This campaign will upgrade software that helps Tire Pressure Monitor (TPM) sensors recognize from which tire pressure data is coming. Absent such capability, a warning light may falsely signal low tire pressure. The fourth campaign will reconfigure a TPM module to disable a test mode that was inadvertently left on following shipment from the supplier. When installed in a vehicle, a TPM module configured this way may not get accurate tire-pressure readings, which could result in a false warning. Affected are an estimated 10,390 Jeep Wrangler SUVs and Dodge Grand Caravan/Chrysler Town & Country minivans from model-year 2014 - all in the U.S.

• 17 Parcels to choose from • 30 Miles North of GM Tech Center

Your Builder or Ours

Almont Schools

For info call Judy Giffin, Emporio Casa R.E. Services, 586-531-4166

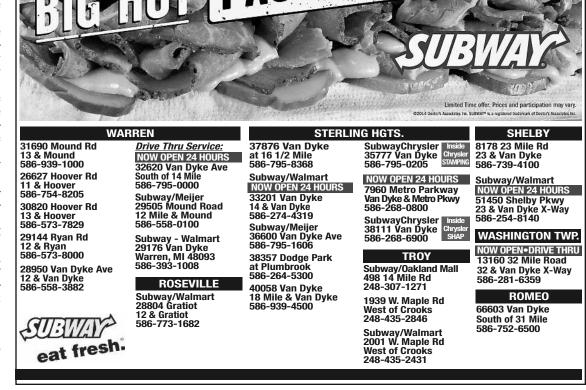
lows an investigation of two cases in which fuel-heater housings showed signs of overheating. Chrysler is unaware of any incidents involving fire.

Chrysler engineers discovered a terminal connector near the fuel heater may be subject to friction-induced corrosion, said company spokesperson Eric Mayne. This condition may lead to overheating and potential fuel leakage.

Service technicians will install new terminals made from upgraded material. Fuel-heater housings will be inspected and, if they show signs of leakage, they will be replaced.

Affected are certain modelyear 2010-2014 Ram 2500 and 3500 pickups, and 4500 and 5500 chassis cabs. An estimated 314,704 are in the U.S.; 59,432 in Canada; 1,803 in Mexico and 5,937 outside the NAFTA region.

Chrysler is also recalling an estimated 184,186 SUVs globally, to upgrade software



Tech Center News

NOVEMBER 3, 2014

COVERS THE TECH CENTER AND THE IMMEDIATE AREA

PAGE 3

Barra Talks Industry Change, Technology Advancement

CONTINUED FROM PAGE 1

the world around them, using a wireless technology called V2X. This encompasses both vehicleto-vehicle and vehicle-toinfrastructure technology. It should reduce crashes dramatically.

"Cadillac will take the lead for our company. The 2017 modelyear CTS, to be built in Lansing, will be the first GM vehicle to carry V2X technology. And we believe it will also be the first for the U.S. industry."

GM is also joining forces with the Michigan Department of Transportation, the University of Michigan and other automakers to create V2X-enabled corridors on 120 miles of metro Detroit roadways, Barra said.

"Another area where GM has placed a significant bet is in the electrification of the automobile," she said.

"We introduced the Chevy Volt in late 2010 and in the intervening four years we have learned a lot about both the challenges and the promises of designing, engineering, manufacturing and selling an electric vehicle.

"The scorecard on the firstgeneration Volt is good, but not everything we wanted. We sold fewer than we expected. But, again, we have learned so much, including that breakthrough technology doesn't always advance in a straight line.

January, GM will introduce our

next-generation Volt. When it launches in the second half of 2015, it will represent a significant leap forward in technology, design and overall refinement. It will store more energy in its batterv pack with fewer cells, yet go further on a charge. It will accelerate faster. And the car's gas generator will come from an allnew GM engine family and use even less fuel.

"The Volt is a leap forward in automotive technology, and it has already had a profound impact on this region," Barra said. "Of the more than \$5 billion GM has invested in Michigan since 2009, over \$1.8 billion of that amount was dedicated to make our state GM's global center of excellence for vehicle electrification.

"This investment helped make our Brownstown Township facility the country's first high-volume lithium-ion battery pack manufacturing site operated by a major automaker.'

This investment also helped fund new body shop tooling, equipment, and additional upgrades at the Detroit-Hamtramck assembly plant, which builds the Volt, Barra said, adding that it will also allow GM to build the next-gen Volt's gas engine in Flint.

"Now we are prepared to go the next step," Barra said. "Along with the investment news I mentioned earlier, the second announcement I am pleased to share today is that we will build the new Volt's electric drive system in Warren. This means that

all of the Volt's major components - the battery cells, the battery pack, the electric drive unit, and the gas motor - will be made in Michigan. For GM, this electrification technology is an important element of our global business plan. And we are determined that this region will be the recognized global leader of electric vehicle development.'

Barra said she wants GM to excel, to win in the marketplace and that Silicon Valley doesn't have the corner on innovation.

"Johan De Nysschen, our new president of Cadillac commented recently . . . that our competitors are 'absolutely 100 percent immersed in annihilating the opposition," Barra said. "He's right. This is reality. And we must be equally determined to prevail."

Bollyfit Heads to Warren Library

The Warren Public Library will hold a special fitness experience at the Civic Center branch Thursday, Nov. 16, at 6 p.m.

'We are offering Bollyfit," said Civic Center branch librarian Kathy Faba. "Bollywood dance has been hot for years and this fitness class melds mindfulness and excellent physical workouts with Indian dance styles like Bhangra and Bollywood."

Those wishing to attend should bring appropriate workout clothing. Barefoot dancing will be encouraged, but athletic shoes will be okay, Faba said.

To learn more and reserve a spot, call 586-574-4564.



The U.S. Department of Energy's (DOE) Fuel Cell Technologies Office (FCTO) and the Hydrogen Education Foundation (HEF) launched a competition for the \$1 Million H2 Refuel H-Prize on Oct. 30. The two-year competition challenges America's engineers and entrepreneurs to develop affordable systems for small-scale hydrogen fueling.

Contest spokesperson Emanuel Wagner of the Hydrogen Education Foundation said this H-Prize competition will assist in "At the Detroit Auto Show in expanding the hydrogen infrastructure across the country to

support more transportation energy options for U.S. consumers, including fuel cell electric vehicles (FCEVs).

Successful entries will install and test systems that generate hydrogen using electricity or natural gas for refueling hydrogen vehicles, Wagner said. The winning team will receive a \$1 million cash prize.

Hydrogen infrastructure remains the most critical barrier to the widespread adoption of FCEVs. The H2 Refuel competition aims to address this barrier through easily deployed smallscale fueling systems for home and community use until widespread infrastructure development takes place.

With support from the FCTO, private industry, and the Energy Department's national laboratories, significant advances in fuel cell and hydrogen technologies have already been achieved, Wagner said. Recently, automotive fuel cell costs have been reduced by more than 50 percent, fuel cell durability has doubled, and the amount of expensive platinum needed in fuel cells has fallen by 80 percent since 2005.









Beaumont Medical Center, Warren

8545 Common Road, Warren, MI 48089 (located in the Civic Center area)

Services include lab, physical therapy, X-ray, mammography and ultrasound, as well as several community physician offices, including primary care, pediatrics and obstetrics/gynecology.

> Do you have a Beaumont doctor? 800-633-7377

Beaumont[®]

Beaumont.edu/warren-medical-center

Sterling Heights Mayor Richard Notte Dies at 76

Heights Sterling Mayor Richard J. Notte died in his home of complications from pancreatic cancer on Tuesday, Oct. 28. He was 76 years old.

A part of Sterling Heights municipal government for more than 30 years, Notte was serving his 11th two-year term as mayor. He previously served 10 years as a member of the city council before becoming the first mayor to be directly elected by a vote of the city electorate.

While donning his trademark fedora, Mayor Notte was immediately identifiable throughout the community when representing his constituents at thousands of ribbon cuttings, charity balls, dinners, luncheons, school events, and scouting ceremonies. Notte always said he believed his role was to serve all Sterling Heights residents.

called a politician," Notte said in a 2013 induction speech to the Macomb Hall of Fame. "I'd rather be called a representative, representing the people, because it's what I do.'

Notte earned two associate's degrees from Macomb Community College, one in applied science and one in labor studies. He retired from Ford Motor Company in 2004 after 45 years of employment. While there, he held several elected UAW positions and was plant chairman and recording and financial secretary. He was a committeeman and had represented constituents since 1972.

Notte fought tirelessly to keep the Sterling Heights Assembly Plant (SHAP) open following the Chrysler bankruptcy. His passion in his name.



Mayor Richard Notte

and commitment paid off when Chrysler acquired the SHAP assets and invested over \$1 billion to construct a new assembly facility and paint shop at SHAP.

We are deeply saddened by "I, myself, don't like to be the passing of Mayor Notte," said Brian Glowiak, Chrysler director of Civic Relations and Community Engagement, in a statement to the media.

"It is a sad day for the city and for all of the people he impacted both personally and through his long and dedicated service to the City of Sterling Heights. We will truly miss his leadership and his charismatic personality.'

Notte was a strong advocate for Sterling Heights Community Foundation and its mission to enhance cultural, educational and recreational opportunities for Sterling Heights residents.

In 2010, Notte funded the "Richard J. Notte Scholarship for Public Service Endowment," which will annually present a college scholarship to a student



CONTINUED FROM PAGE 1

isting Crew Chief powered by Telogis and is designed specifically to help meet the monitoring needs of law enforcement agencies, Frykman said.

The technology provides intelligent data and analytics that law enforcement agencies need to dramatically improve officer safety and driving behavior, heighten situational and operational awareness, and help reduce vehicle maintenance costs.

With the addition of Ford Telematics on Ford Police Interceptor vehicles, police administrators can monitor officer location and vehicle operating conditions, Frykman said.

While many agencies have policies that require officers to avoid excessive speed and that promote safety belt use, until now they had no visibility into the real-time driving habits of officers to enable training and encourage safe driving behaviors.

Ford Telematics for Law Enforcement builds upon the core design and engineering philosophy of the Ford Police Interceptor for maximizing officer safety, said Ford spokesperson Chris Terry, adding that this is key to helping prevent police crashes by mitigating high-speed driving and encouraging safety belt use.

"We have a responsibility to the communities we serve and to our fellow officers to make safety behind the wheel one of our top priorities," said Vartan Yegiyan, director of police transportation II and commanding officer at the Los Angeles Police Department.

"The collaborative process that exists with the LAPD, Ford and Telogis has allowed us to customize this solution to meet the unique demands of our organization and other Ford police fleets."

"Vehicle accidents are the leading cause of officer fatalities," said Frykman and even the slightest improvements in driver training and behavior within law enforcement organizations can potentially save lives.

"Whether in emergency operation or not, vehicle data from this technology, in context with different driving situations will help illustrate to police organizations where changes can be made that will have a profound effect on officer safety.

"Working with Ford," said Greg Dziewit, vice president, OEM business at Telogis, "we're delivering a solution for training and visibility for police departments that will be a game-changer for their safety programs.

"Combining exclusive Ford Interceptor vehicle data with the Telogis platform provides law enforcement agencies with unprecedented levels of intelligence about their fleet operations to drive safety, improve situational awareness during critical events and reduce overall costs.'

While firearm-related police fatalities often make headlines, police administrators know traffic fatalities and injuries represent a greater statistical threat to officer safety, Terry said.

According to data from the National Law Enforcement Officers Memorial Fund, from 2004 to 2013, an average of nearly 55 officers were killed each year as a result of a firearms-related incident. For the same time period, an average of 64 officers a year died in traffic-related incidents.

"Traffic-related incidents have been the leading cause of law enforcement fatalities in 14 of the last 16 years," said Craig W. Floyd, National Law Enforcement

WEEKEND GETAWAN PACKAGE

3 DAYS & 2 NIGHTS

• Jacuzzi Suites • Fireplace

Early Check-in Friday. Late Check-out Sunday.

Call 989-856-2650

or visit bella-caseville.com

Officers Memorial Fund chairman and CEO.

"Leveraging technology to improve law enforcement vehicle safety is integral to reducing the number of officers killed in traffic-related incidents each year."

In addition to safety belt use monitoring, the new system builds upon existing capabilities of Ford Crew Chief powered by Telogis to provide visibility into police vehicle lateral acceleration, spins, yaw rates, pursuit mode, accelerator pedal position, brake pedal position, engine torque, antilock braking system events, and stability control and traction control events, Frykman said.

Agencies can also get individualized scorecards on police officers' driving behaviors based on these inputs.

Last year, Ford unveiled a surveillance mode feature that uses existing sensor technology to automatically roll up windows, lock doors and sound an alarm if someone approaches an officer's parked vehicle from the rear.



Michael Millikin

Millikin to Retire In 2015, Led GM's 9/11 Response

GM General Counsel Michael Millikin has informed the Detroit automaker of his decision to retire in early 2015.

The company will immediately begin an external search for his replacement, said GM spokesperson Pat Morrissev.

"Mike has had a tremendous career, spanning more than 40 years, with the vast majority of it at GM," said GM CEO Mary Barra.

"He has led global legal teams through incredibly complex transactions, been a trusted and respected confidant to senior management, and even led the company's global business response team following the tragedy of 9/11.

"For me, personally, Mike has been incredibly helpful over the past two decades," Barra said. "I find him a man of impeccable integrity, respectful candor, and unwavering loyalty. He will be missed. "I wish him and his wife Karen much happiness in this next chapter of their lives.' "Mike has served the Board extremely well," said Tim Solso, chairman of the General Motors Board of Directors. "He has been a valued advisor, a strong leader and a consistent and honest voice over the past several years. On behalf of the Board, I wish him well in retirement." Millikin, 66, will remain in his position until the transition of the new General Counsel is complete, Morrissey said.



ANSWER THE BIG QUESTIONS:

- How can I preserve my portfolio in a repeat of the 2008 financial crisis?
- Might my retirement plan be in jeopardy if we see global deflation?
- Where could I put my money if there is a European recovery?

Use our app to stress test your portfolio today!



KAYDAN

WEALTH MANAGEMENT

An Independent Firm

329 W. Silve Lake Road | Fenton, MI 48430 Ph. 810-593-1624 | 800-638-6900 | Fax 810-593-1643 KaydanWealthManagement.com

Securities offered through Raymond James Financial Services, Inc., member FINRA/SIPC

Some GM career highlights:

• Joined GM in 1977;

• Joined the overseas legal matters practice area in 1981;

• Named head of the in-house litigation practice area in 1987, where he spearheaded the company's response to the theft of confidential documents and data by Jose Ignacio Lopez and some of his followers.

2015 Chevy City Express Hitting Dealer Showrooms

Chevrolet's new 2015 City Express cargo van, with a starting price of \$22,950, began shipping to dealerships Oct. 24.

"Our existing customers will love getting behind the wheel of the City Express when it's at their Chevrolet dealership," said Ed Peper, GM U.S. vice president, Fleet & Commercial.

To make the shopping and purchasing process easier and more convenient, Peper said, Chevrolet offers web tools on Chevrolet.com that provides customization options for potential buyers.

"We understand our customers are often too busy to step away from the office to visit a dealership," said Peper.

"So we give them the option to build a City Express online with their specific color, trim, and even wheels, so that they are fully aware of the cost to their business before they meet with a salesperson."

Buyers also can compare online the City Express to other vehicles in the marketplace to see how it stacks up in areas like

fuel economy, pricing, and safety, Peper said.

The City Express will be a part of Business Choice, an incentive program that provides qualified business owners a \$350 Upfit Cash allowance, Peper said.

Chevrolet also will offer customers "ship-thru" service, which sends the vehicle directly to an upfitter from the plant and the upfit vehicle is delivered directly to the dealer once complete.

The ship-thru process makes it simple and convenient to upfit the City Express to meet the specific needs of the business

City Express will be covered by Chevrolet Complete Care, which includes scheduled maintenance for two years or 24,000 miles, whichever comes first, 5 years/100,000 miles of 24-hour roadside assistance and courtesy transportation.

And it's covered under Chevrolet's five-year/100,000-mile powertrain warranty, as well as a three-year/36,000-mile bumperto-bumper limited warranty.



²⁰¹⁵ Chevrolet City Express

Golub Leaving Cars.com, Jauernig Becomes President

Cars.com's Mitch Golub is stepping down from his position ings serving 20,000 dealers of president after nearly two decades of leading the company. Dan Jauernig, chief executive officer of Cars.com, will assume the added role of president.

Jauernig is a 14-year veteran of Classified Ventures, the former ownership company of Cars.com.

Golub will stay on with the company to help transition through March 1, 2015, said Cars.com spokesperson Jackie Brennan.

Alex Vetter, currently the company's senior vice president, will now take on the new and expanded role of executive vice presi-

more than 4 million vehicle listacross the country and every U.S. automaker.

On Oct. 1, Cars.com was sold to Gannett Co., Inc., for \$2.5 billion.

During Golub's tenure, he was responsible for the development of Cars.com's strategic direction, and ensuring the company's sales, finance, marketing, product development, media and business development areas were all closely aligned with the company's vision and positioned for sustainable growth.

"Working at Cars.com for the past 18 years has been an incredible journey," said Golub. "I've



Get Great Deals on EVERY New 2014 & 2015 Model In

THIS WEEKS

dent and chief operating officer, Brennan said.

Vetter has helped steer the company's growth strategy from concept into a multi-faceted sales and distribution model that spans all aspects of Internet marketing, including local. mobile and social media, said Brennan.

Over the years, Vetter has operated in nearly every capacity at Cars.com, including product development, customer service, training and operations, and currently oversees all revenue-generating activities.

Golub has been with Cars.com since its inception in 1997. As the first employee and founding executive, he has played a pivotal role in the rapid growth of the company, Brennan said.

What began as a small start-up with 21 employees, 50,000 vehicle listings and fewer than 1,000 dealer customers in its first year, Cars.com has grown to a 1,300plus-employee company with

witnessed the maturation of not only our company but the automotive digital space as a whole. It has been the most rewarding experience of my career, but now is the right time for me to move on.

"As the leader of Cars.com, my job was to not only help build the business but to ensure the company would flourish long after Lleft.

"I am confident that with new owners, the terrific workforce we have and with Dan Jauernig and Alex Vetter at the helm, Cars.com will prosper for many, many vears to come.'

Jauernig said, "I've worked with Mitch for over a decade, and I want to thank him for his leadership and the extensive contributions he's made to Cars.com. He will be deeply missed and I wish him nothing but the best in his future endeavors. Looking forward, we are excited about what's ahead for this industry and our business."





\$1,950 due at signing plus tax, title, plate & doc. CTS to CTS Loyalty. required. Must document current lease of 2004 or newer GM vehicle. No sec. dep

36 MO. LEASE	10K MILES PER YEAR
EVERYONE	^{\$} 429
EMPLOYEE	\$399

2015 ESCALADE





\$2,390 due at signing plus tax, title, plate & doc.

36 MO. LEASE	10K MILES PER YEAR
EVERYONE	^{\$} 419
EMPLOYEE	\$ 3 99



NHTSA Cracks Down on Supplier of Faulty Airbags

DETROIT (AP) - The U.S. government's auto safety agency, responding to criticism of its slow response to safety issues, told the manufacturer of millions of potentially faulty air bags to make replacement parts faster and do more testing to find the cause of the problem.

The National Highway Traffic Safety Administration sent letters Oct. 29 to Japanese air bag maker Takata Corp. and 10 automakers seeking information in an air bag recall that now covers almost 8 million U.S. vehicles.

The vehicles are equipped with Takata air bags that can potentially inflate with too much force, blowing apart metal canisters and sending shards flying at drivers and passengers. Safety advocates say four people have died due to the problem.

Tests by Takata have shown that prolonged exposure to high humidity can cause the inflators to malfunction. Some automakers have limited their recalls to a small number of high-humidity areas, but lawmakers and others are demanding that recalls be expanded nationwide.

Takata, the world's secondlargest air bag maker with 22 percent of the market, has been plagued by problems for the past 13 years. For varying reasons, more than 12 million cars with its air bags have been recalled worldwide

Honda has been hit hardest in the latest round of recalls with about 5 million cars called back. Other affected OEMs include Nissan, Chrysler, Ford, Mazda, Subaru, Mitsubishi, Toyota, BMW and General Motors. Lawmakers say that 30 million cars with potentially faulty Takata air bags are driving on U.S. roads.

In the letter, NHTSA Deputy Administrator David Friedman told Takata that its inflators are "creating an unacceptable risk of deaths and injuries by projecting metal fragments into vehicle occupants rather than properly inflating the attached air bag."

The letters sent to automakers urge them to speed up owner notification and replacement part distribution. Friedman told Takata that those efforts won't work if it doesn't produce enough parts.

Takata's production capacity is critically important, Friedman wrote. The letter states that Takata has agreed to take "aggressive steps" to accelerate production, but Friedman demands that the company state its current production capacity and the ability to expand it and how long it would take. He also asks about the possibility of getting replacement parts from other inflator manufacturers, and how the company is tracking inventory and quality verification.

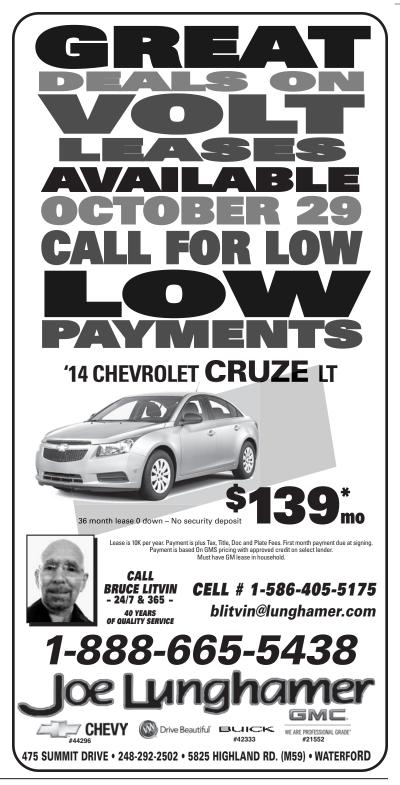
"Production of replacement parts must not just be expedited, it must be prioritized," Friedman wrote.

Takata is cooperating and working to comply with NHTSA's requests, spokesman Albv Berman said.

NHTSA also asked the automakers for test results on air bags that were sold outside highhumidity areas.

The agency has said it has no data showing the problem has happened outside high-humidity areas.

Former Hyundai North America CEO John Krafcik, who now heads the TrueCar.com auto pricing site, said a nationwide recall is the only way to solve the problem.



NOW AVAILABLE!

\$2,300 due at signing plus tax, title, plate & doc. No sec. deposit. Must document current lease of 2004 or newer GM vehicle.		
36 MO. LEASE	10K MILES PER YEAR	
EVERYONE	\$374	
EMPLOYEE	\$329	



Showroom Hours: Mon. & Thurs. 8:30 a.m.-8 p.m. • Tue., Wed., & Fri. 8:30 a.m.-6 p.m. • Sat. 10 a.m.-4 p.m. 8333 EAST 11 MILE ROAD • I-696 & VAN DYKE • 888-548-8939 Visit our website: www.PrestigeCadillac.com for all our specials

* Tax, title, license and dealer fees extra. No security deposit required. 30,000 miles with approved lease. Mileage charge of \$.25 per mile over 30,000 miles. Lessee pays for excess wear and tear charges. All applicable rebates to dealer. Photo may not represent actual vehicle. ATS, CTS, XTS & ELR must show proof of current lease of a 2004 or newer GM vehicle and lease eligible new 2014 Cadillac. 0% up to 60 months on approved credit on all 2014 except ELR & Escalades. MRSP's: CTS \$51,700, XTS \$45,525, ATS 2.0 \$39,660, 2015 ATS coupe \$49,090, SRX \$38,750. See dealer for details. Take delivery by 11/3/14.

'We'll Exceed Owners' Expectations with New Volt,' Says Global Chevrolet's Batey

Chevrolet Volt debuts at the North American International Auto Show in January, it will feature a new propulsion system.

Substantially developed from Volt owners' data they collected on their driving behaviors, the Voltec extended range electric vehicle (EREV) propulsion system includes the battery, drive unit, range-extending engine and power electronics.

The new system will be more efficient and offer greater EV range and fuel economy compared with the current generation.

'Our Volt owners truly love the EV driving experience, with more than 80 percent of all trips being completed without using any gasoline," said Alan Batey, head of Global Chevrolet. "We've used their real-world experiences to the next-generation define Chevrolet Volt.

"By putting our Volt owners at the center of what we do and leveraging our electrification engineering leadership, we've been able to raise the bar and will exceed their expectations with the new Volt.'

General Motors' battery technology has been improved for the next-generation Volt. Revised cell chemistry, developed in conjunction with LG Chem, increases storage capacity by 20 percent on a volume basis when compared with the original cell, while the number of cells decreases from 288 to 192.

The cells are positioned lower in the pack for improved (lower) center of gravity and the overall mass of the pack has decreased by almost 30 pounds.

Approximately 20 million battery cells have been produced for the more than 69,000 Chevrolet Volts on the road today with quality levels of less than two problems per million cells produced.

The battery system continues to use the Volt's active thermal control system that maintains electric range over the Volt's life. "The current-generation Volt's

When the next-generation battery has proven to provide our owners exceptional performance when it comes to quality and reliability," said Larry Nitz, executive director of GM Powertrain's electrification engineering team.

> Based on a GM study of more than 300 model-year 2011 and 2012 Volts in service in California for more than 30 months, Nitz said many owners are exceeding the EPA-rated label of 35 miles of EV range per full charge, with about 15 percent surpassing 40 miles of range. Current-generation Volt owners have accumulated more than 600 million EV miles.

> "It would have been simple for us to tweak our existing battery to provide nominally increased range, but that's not what our customers want," said Nitz. "So our team created a new battery system that will exceed the performance expectations of most of our owners."

> EV range estimates will be revealed in January at the North American International Auto Show in Detroit, Batey said.

> GM will manufacture the Volt battery pack at its battery assembly plant in Brownstown, Mich.

> Like the battery system, the next-generation Volt's drive unit was reengineered with a focus on increased efficiency and performance, improved packaging and reduced noise and vibration characteristics, said Nitz. The two-motor-drive unit operates approximately 5 to 12 percent more efficiently and weighs 100 pounds less than the current system, he said.

The Traction Power Inverter Module, said Nitz, which manages power flow between the battery and the electric drive motors, has been directly built into the drive unit to reduce mass, size and build complexity while further improving efficiency.

The boost in performance comes from both motors operating together in more driving scenarios, in both EV and extended-range operation, said Nitz,

adding that the ability to use both motors helps deliver more than 20 percent improvement in electric acceleration.

GM engineers designed the Voltec electric motors to use significantly less rare earth materials, said Nitz, adding that one motor uses no rare earth-type magnets at all.

The new drive unit will be manufactured at GM's Powertrain plant in Warren.

Energy for extended-range operation comes from a new, highefficiency 1.5L 4-cylinder engine. The engine features a direct injection fuel system, high-compression ratio of 12.5:1, cooled exhaust gas recirculation and a variable displacement oil pump. The Voltec range extender runs on regular unleaded fuel.

"Using the 1.5L engine as the range extender assures owners they can go anywhere, anytime without having to worry about whether they have enough power to go through the Rocky Mountains or on a spontaneous weekend getaway," Nitz said.

"It's all about keeping the promise that the Volt is a nocompromise electric vehicle."

The 1.5L engine will be manufactured at GM's Toluca, Mexico, engine plant for the first year of production, then shift to the Flint engine plant.

Since its introduction in late 2010, the Volt has established southeast Michigan as the hub of vehicle electrification development and manufacturing, Batey said.

The next-generation Volt will feature approximately 70 percent U.S. and Canadian components within its first year of production, a nearly 20 percent increase from the first-generation.

HAPPY

2015 EOI

NO SECURITY

from



Willow Run's War History to **Be Preserved by Yankee Air**

BV MIKE HOUSEHOLDER Associated Press

YPSILANTI TOWNSHIP. Mich. (AP) - Rosie the Riveter's old plant in Michigan has officially avoided the wrecking ball.

Yankee Air Museum board chairman Ray Hunter signed papers Oct. 30 making the aviation museum the owner of a 144,000square-foot slice of the former Willow Run Bomber Plant, where Rose Will Monroe and other workers built B-24 Liberator bombers during World War II. The signing ceremony represented the culmination of efforts to raise the \$8 million needed to save part of the factory for the nearby Yankee Air Museum's new home. The building is truly saved," said Michael Montgomery, a consultant on the fundraising effort. Hunter, Montgomery and others associated with the Save the Willow Run Bomber Plant campaign want to convert the factory and dedicate it to aviation and all the Rosies who toiled at similar U.S. plants to aid the war effort. 'We're very proud that we played a part in preserving" the plant, which "contributed so much to our victory in World War II," Hunter said.

Technology at Historic Willow Run. "If we're telling the Arsenal of Ne Ne

free!

Democracy and Rosie story, this is the place to do it," said Montgomery.

He said \$5 million more is needed to "fill out the interior of the building" – to create the exhibits and infrastructure necessary to transform the edifice into a museum.

2014

DBL DOOR

4X4

Following the signing event, two Rosies unveiled the name and logo of the planned facility: National Museum of Aviation and

The facility in Ypsilanti Township, west of Detroit, was owned by the Revitalizing Auto Communities Environmental Response (RACER) Trust.

The company took control of sites around the country left behind in General Motors' bankruptcy

RACER Trust is overseeing the demolition of the massive plant. The section purchased on Oct. 30 would have been razed if Yankee Air Museum hadn't stepped in and purchased the property.

The Willow Run factory, which was built by Ford Motor Co. and featured a mile-long assembly line, at its peak churned out one B-24 Liberator bomber every hour for a total of nearly 9,000 in all

The factory transitioned to producing automobiles after the war ended.

Cars and auto parts were manufactured at the site for more than a half-century under the GM name.



Solar Panels Generate Electricity for EVs

By DEE-ANN DURBIN AP Auto Writer

DETROIT (AP) – Owners of electric vehicles have already gone gas-free. Now, a growing number are powering their cars with sunlight.

Solar panels installed on the roof of a home or garage can easily generate enough electricity to power an electric or plug-in gaselectric hybrid vehicle.

The panels aren't cheap, and neither are the cars. A Ford Fusion Energi plug-in sedan, for example, is \$7,200 more than an equivalent gas-powered Fusion, even after a \$4,007 federal tax credit.

But advocates say the investment pays off over time and is worth it for the thrill of fossil fuel-free driving.

"We think it was one of the best things in the world to do," says Kevin Tofel, who bought a Chevrolet Volt in 2012 to soak up the excess power from his home solar-energy system. "We will never go back to an all-gas car."

No one knows exactly how many electric cars are being powered by solar energy, but the number of electric and plug-in hybrid cars in the U.S. is growing.

Last year, 97,563 were sold in the U.S., according to Ward's AutoInfoBank, up 83 percent from the year before. Meanwhile, solar installations grew 21 percent in the second quarter of this year, and more than 500,000 homes and businesses now have them, according to the Solar Energy Industries Association.

Tofel, 45, a senior writer for the technology website Gigaom, installed 41 solar panels on the roof of his Telford, Pa., home in 2011. The solar array – the term for a group of panels – cost \$51,865, but after state and federal tax credits, the total cost was \$29,205.

In the first year, Tofel found that the panels provided 13.8 megawatt hours of electricity, but his family was using only 7.59 megawatt hours. So in 2012, Tofel traded in an Acura RDX for a Volt plug-in hybrid that could be charged using some of that excess solar energy. In a typical year, with 15,243 miles of driving, the Volt used 5.074 megawatt hours.

Tofel used to spend \$250 per month on gas for the Acura; now, he spends just \$50, for the times when the Volt isn't near a charging station and he has to fill its backup gas engine.

Charging the Volt overnight costs him \$1.50, but the family makes that money back during the day when it sends solar power to the electric grid. He estimates that adding the car will cut his break-even point on the solar investment from 11.7 years to six years.

Powering a car with solar ener-

electricity. Now, he pays \$5.36 per month, the administrative fee for connecting to the grid.

That fuels his home and his allelectric Nissan Leaf, which uses around a third of the energy that his solar panels generate. Webster thinks he'll break even on his investment in six years.

Some solar companies offer leasing programs, which let customers pay a fixed monthly cost for panels. There are also some incentive programs; Honda Motor Co. offers \$400 toward the installation of panels through SolarCity, a company that installs them in 15 states.

Buyers also could consider a smaller system just to power a car. A Leaf needs around 4.5 megawatt hours of electricity per year to go 15,000 miles. Eighteen 250-watt panels – a \$13,500 investment at \$3 per watt – would produce that much electricity.

• The Car – For Webster, who has a predictable roundtrip commute of less than 50 miles and lives near a lot of electric charging stations, an all-electric car like the Leaf makes sense. But for Avery, who lives in rural Kentucky, the Volt was the better choice because he needs the security of a backup gas engine.

The U.S. Environmental Protection Agency's fuel-economy website – www.fueleconomy.gov – lists the number of kilowatt hours that a car uses to travel 100 miles, which can help potential buyers calculate their energy needs.

In short, people considering powering a car with solar energy have some math to do. Or maybe they don't. For Avery, the environmental benefit outweighs everything.







gy isn't for everyone. Among things to consider:

• Site – A south- or southeastfacing roof is a necessity, and there can't be shady trees around the house. Sam Avery, who installs solar panels in Kentucky through his company, Avery and Sun, says dormers, chimneys and other design features can hamper an installation.

"If people do have a good site, it's usually by chance," he says. "I have to retrofit a lot."

• Cost – The cost of installing solar panels has come down, from \$8 to \$10 per watt eight years ago to \$3 a watt or less now. But it's still a huge investment.

Bill Webster, 39, a graphic designer at a nonprofit in Washington, D.C., paid \$36,740 for his solar array in Frederick, Md., three years ago, or around \$3.60 per watt. Tax credits reduced his net cost to around \$20,000.

Before the installation, his family was paying \$1,500 per year for