

The Washington Times

# 2014 AUTO PREVIEW

POLICY &  
BUYERS GUIDE



Sen. James Inhofe (R-OK) .....	7	Rep. Michael Honda (D-CA).....	8
Rep. Tom Petri (R-WI).....	7	Rep. Todd Rokita (R-IN) .....	8
Rep. Robert Goodlatte (R-VA).....	7	Rep. Kerry Bentivolio (R-MI).....	10
Rep. Lee Terry (R-NE) .....	8	Joe Jobe .....	10

# Electric car market has serious hurdles to overcome

By **BEN WOLFGANG**  
THE WASHINGTON TIMES

President Obama's goal of putting 1 million electric cars on the road by 2015 is no longer realistic, analysts say, and while automakers have made real strides in both the quality and variety of such vehicles, there remain significant obstacles before the market can compete with traditional gas-powered products.

"Electric vehicles are a good solution, but they're a good solution only to a very limited market right now. Right now, it's not a broad solution to replace liquid-fuels vehicles," said Kevin Riddell, a powertrain analyst at LMC Automotive, a Michigan-based auto-industry research and analysis company. "The primary barrier right now for electric vehicles is range and a lack of refueling."

Despite more than \$5 billion of federal investment into the electric and hybrid vehicle sectors — including the loss of \$139 million following the bankruptcy of Fisker Automotive — the products remain far less appealing to average Americans than traditional cars, trucks or SUVs. The federal government continues to offer a \$7,500 tax credit for buying an electric vehicle, though that initiative also has failed to spark the kind of market explosion needed to meet Mr. Obama's target figure.

Right now, there are about 100,000 plug-in electric vehicles on the road, Mr. Riddell said. The single greatest problem right now for purely electric vehicles — which differ from their



ASSOCIATED PRESS

hybrid counterparts, which can run on gasoline power when their battery charges run out — comes down to range.

On average, electric vehicles get between 70 miles and 100 miles per

charge, Mr. Riddell said, though the industry is making constant advances in battery technology and those numbers almost surely will rise.

Supporters argue such range, while limited, is enough for the vast majority

of Americans.

"For a very large number of people, an electric vehicle with a 50-mile range would more than do their daily travel," said Zoe Lipman, senior policy adviser at the BlueGreen Alliance, a coalition

of labor unions and environmental organizations.

Ms. Lipman pointed to data showing most Americans don't drive more

» see **FUTURE** | D5



ASSOCIATED PRESS

A model poses next to a Hyundai Tucson fuel cell on display at the Kuala Lumpur International Motor Show in Kuala Lumpur, Malaysia, in 2014. Hyundai says it will start selling Tucson SUV powered by a hydrogen fuel cell. It will be the first mass-market vehicle of its type to be sold or leased in the U.S.

## Coming soon to a road near you Hydrogen power still has to overcome infrastructure hurdle

By **PHILLIP SWARTS**  
THE WASHINGTON TIMES

The next innovation in environmentally friendly transit is on the horizon, as hydrogen-fueled cars are expected to hit the road over the next year, with some of the concept vehicles making appearances at this year's Washington Auto Show.

"The technology is now very close to being cost-competitive," said Morry Markowitz, president and executive director of the Fuel Cell and Hydrogen Energy Association. "Usually you get that tipping point where consumers see the value and cost differential and they see the benefit and do the calculation."

Hydrogen fuel is one of the cleanest energy sources, researchers say, producing water vapor as the only byproduct.

Several car companies are expected to release hydrogen-fueled cars in the next two years. Hyundai has announced a limited number of its new cars will be available in the next few months. Toyota is expected to release a version in 2015, and Honda is also working on one.

One of the challenges of getting consumers to accept the vehicles had been the high cost of hydrogen systems, but Mr. Markowitz said that, like almost every other piece of technology, the price is coming down as research becomes better and manufacturing more efficient.

Hydrogen-powered cars are the only zero-emission vehicles coming in the near future that will match drivers' experiences of being able to drive 300-plus miles between refueling, and refilling tanks in three to five minutes, he said.

But the largest hurdle remaining is infrastructure. Hydrogen fuel requires special pumps for topping off drivers' tanks, items that are practically nonexistent in most parts of the country.

"One of the biggest challenges, especially in the Washington metropolitan area, will be development of the

infrastructure," said Toyota spokesman Ed Lewis. "Currently, the nearest hydrogen refueling station is more than 100 miles away."

Without places to refuel, hydrogen development likely will be limited to places where fuel is already available, he said, such as California, which expects to have 20 hydrogen refueling stations by 2015 and 45 by 2016.

"We continue to support the growth of more hydrogen fueling stations, and believe state and federal government have a role to play in expanding the infrastructure nationwide," Mr. Lewis said. BMW is taking a more long-term approach.

"The costs involved in building fuel cell electric vehicles (above all the fuel cell and hydrogen tank) are currently still too high to warrant mass production," spokesman Manfred Poschenrieder said in a statement. "A marketable product is not conceivable before 2020 at the very earliest and depends on the availability of an adequate filling station infrastructure."

The possibility of hydrogen-powered cars also has drawn a line in the sand among some companies heavily investing in electric vehicles.

"Personally I don't really care what Elon and Carlos and Jonathan have to say about fuel cells, said Bob Carter, a senior Toyota VP, calling out by name current and former executives of Tesla, Nissan and Volkswagen, respectively — all companies focused on producing electric vehicles.

Mr. Carter made the comments at the Detroit Auto Show, where he labeled critics of hydrogen "naysayers" and predicted the new vehicles would be as popular as the Prius hybrid car.

Mr. Markowitz said it's a false choice and that electric and hydrogen-powered cars likely will exist alongside fossil-fueled vehicles.

"Automakers are going to have a

portfolio of vehicles: the internal combustion engine, hybrids, plug-in hybrids, battery electric and fuel cell electric," he said. "We already see that happening right now."

Hydrogen fuel is commonly created by breaking water molecules down into their comprising components. The energy need to do this can be supplied by fossil fuels, negating the pollution reduction. But the catalyst to create hydrogen and charge the fuel cells can also be renewable energy sources like wind power, a prospect that could allow cars, trucks and buses to run with practically zero carbon emissions. In the engine, the hydrogen is recombined with oxygen, the reaction creating electricity to power the vehicle.

The technology has wide possibilities. Although the attention has been focused on transportation, some researchers believe clean hydrogen eventually could replace fossil fuels that provide energy for homes and other buildings.

Support for hydrogen power in Washington has not been without difficulties. Last year, The Washington Guardian reported that Republican lawmakers were petitioning the Energy Department to support hydrogen fuel development and send research money back to their home districts at the same time they were criticizing President Obama's clean-energy policies.

In October, The Washington Times awarded the Golden Hammer for fiscal waste to the Department of Energy for spending millions of dollars that was supposed to go to hydrogen research on food, drink and entertainment for contractors instead. The agency's internal watchdog, the inspector general, said as much as \$100 million could have been wasted.

So how long before you're behind the wheel of a hydrogen-fueled car?

"Like anything that's transformational, it will take awhile," Mr. Markowitz said.

## Future of driving and some firsts will be on display at Washington Auto Show

By **RITA COOK**  
SPECIAL TO THE WASHINGTON TIMES

When consumers converge on the Washington Auto Show this week to find the Next Big Thing in auto making, don't count on it being the fastest car or the sexiest styling.

These days, automobiles come in all shapes and sizes, and as automakers — foreign and domestic — unite to show their latest and greatest, gear heads can expect to see elevated technologies with offbeat twists, such as General Motors working alongside the U.S. Army to up the ante in more innovative fuel cell testing.

• **What about the Hyundai offering?**

The 2015 Hyundai Tucson Fuel Cell is the world's first mass-produced fuel cell vehicle complete with its own energy production, using an electrochemical process with a 100 kilowatt electric motor and lithium-polymer battery. It's good news for consumers, too, since it can travel 300 miles on a tank while emitting zero greenhouse gases — only water vapor.

Hyundai also will showcase the 2015 Genesis, a completely redesigned luxury sports sedan with new technologies, such as a cabin sensor that can detect when carbon dioxide levels are too high and a second-generation Blue Link telematics and infotainment system integrated with Google Maps and a new Google Glass App.

The 2015 Genesis promises to be a significant product for Hyundai, as the brand moves into the U.S. luxury market with this next evolution of the carmaker's design philosophy — "Fluidic Sculpture 2.0."

• **Ford** is touting its all-new 2015 Mustang and saying "Happy 50th birthday," with record sales for the sports car last year — 77,186.

Not to be forgotten is the 2015 F-150 pickup truck. Having sold 763,402 F-Series trucks in 2013, Ford this year is offering an all-new F-150 with a high-strength aluminum-alloy body and 11 class-exclusive features, such as an integrated loading ramp stowed in the pickup bed and sideview mirror spotlights. And the pickup weighs 700 pounds less than in years past.

• In the world of **Audi**, the A3 sedan is poised to turn heads and set the automaker's standards in the entry premium market. Audi will be showcasing progressive technology, craftsmanship and performance with the A3 and over the next 16 months, and will roll out a complete A3 family, including the Cabriolet, TDI (turbo-charged direct injection) clean diesel, the S3 and the A3 e-tron PHEV (plug-in hybrid electric vehicle).

Even better, Audi's premium compact sedan will offer the latest in progressive technology at a competitive price, starting at \$29,900 even with gold standard details that include exceptional ergonomics and 4G LTE connectivity.

• **General Motors** is touting its connectivity, too, using the OnStar's 4G LTE connection on the Cadillac ATS

Coupe, which will become a mobile hub for consumers by providing easier access to apps and services that require a high-speed data connection. The vehicle employs an "always on" wireless connection, which does not rely on a brought-in mobile device.

The new, faster network also can be used to power CUE Collection, a new in-car app marketplace coming to Cadillac vehicles this year and accessible via an icon on the eight-inch LCD touch screen. It will allow users to download apps directly to the CUE system to organize and update with a long list of available apps.

GM will introduce 15 new or upgraded models, and has announced plans to open four additional plants in China through 2015, enabling production of up to 5 million units annually.

• Meanwhile, **Honda** is hailing its first-ever application of an Acura-designed and -developed eight-speed dual-clutch transmission with a torque converter and a nine-speed automatic transmission, both available on the new 2015 Acura TLX.

Honda will be introducing its 2015 Fit — redesigned from the ground up to deliver an unparalleled combination of style, interior space, fun-to-drive performance and fuel efficiency, plus leading-edge safety, and Acura will debut its 2015 TLX Prototype this year.

• **Kia Motors** is releasing this year its first-ever U.S.-market all-electric vehicle, the Soul EV, as well as a flagship sedan, the 2015 K900 — offering technological firsts including a HUD (Head Up) Display, Surround View Monitor and Rear Cross Traffic Alert.

• **Michael Kroll**, national manager of **Toyota** Product Communications, says that in 2014 the latest version of the Entune multimedia system will begin making its way into the Corolla, Tundra, Camry and Highlander.

Toyota's projections for first full year of sales for new models include the Tundra, at 137,000; the Corolla, at 330,000; and the Highlander, at 140,000.

"The critically acclaimed FT-1 concept vehicle will turn heads," Mr. Kroll says, adding that Toyota will showcase at the Washington Auto Show its hydrogen fuel cell vehicle, which will be available as a production model in 2015.

• Consumers can expect to see the 2015 Chrysler 200 with a nine-speed transmission, the automaker's latest technology. Ram trucks are also the first in the industry to offer a diesel engine in a light-duty truck with an estimated 27 miles per gallon.

**Chrysler** sales for the Washington, D.C., area will include an additional \$500 bonus cash offer on the Patriot, the Town & Country, the Journey, the Ram 1500 Crew, and the 500L Lounge.

Picking and choosing from more than 500 makes and models of cars, trucks and crossover vehicles this year requires mean, savvy decision-making when consumers buy their next automobiles.



# Beyond this Gatehouse is what may well be the "Key" to Cold Fusion — Light Water —

with a bond angle of 114° that may aid in creating heat with cold water... using 2% or less of the energy it creates to generate enough energy to light a home, power the family car or fuel an 18-wheeler on a busy highway.

Water—H<sub>2</sub>O (hydrogen hydrogen oxygen) with a simple bond angle of 104° is absolutely essential to life. All life. Not just people and animals, but all organic life on Earth which includes every organic and inorganic living thing on this planet. A space traveler approaching Earth would be amazed at the one key difference between Earth and all of the other planets in our solar system it appears blue. Our planet looks blue not because water is blue, because it isn't. It is the oxygen molecules present in the atmosphere that make it appear blue. NASA calls Earth the "big blue marble." Most scientists are fascinated by the anomaly, but at least one, an engineer by trade, became ever more fascinated by those simple 104° bond angle water drops that still make the world look blue from space. But that engineer and inventor—John Ellis™ of Crystal Clear™—turned water completely upside down using a radically different, patented method of distillation that permanently changes the bond angle of water from 104° to 114°.

Over 50 years ago John Ellis™, who holds over 28 patents in everything from aeronautical design to the most unique water distilling systems in the world stumbled across the process to alter the property of water with the most unique distillers invented by man. Why distillers? Because John Ellis™ became fascinated by the curative characteristics of water. Water is a solvent and a transporter of all of the elements that enter our bodies. Every nutrient we consume as fuel is transported to every cell in our body by water. Our bodies, while carbon-based, are 96% water. The blood that courses through our veins is largely water. That blood, which carries oxygen to every organ in our body does so because water makes blood liquid enough to flow. Without water as a transporter, your blood would thicken into sludge, and just like clean oil is needed to lubricate industrial gears and keep that machinery running smoothly, water is the lubricant that keeps our body parts working smoothly because water is also the cleanser that clears waste from our body.

Add to that John's natural curiosity about...well, just about everything. So when the Ellis family entertained pharmaceutical pioneer Elmer Bobst (head of what was Warner Lambert at that time, now Pfizer), Mary Lasker, founder of the American Cancer Society and a man known to the Ellis family only as "Otto." At the Ellis estate, John was fascinated by the views of his guests. Otto piqued John's interest to delve deeper into water—simple water—to determine its curative properties. Only, the water John Ellis™ electron distillers created was not simple. The idea came from Otto, who turned out to be Baron Otto von Bolshwing—a man with a CIA dossier that any movie director would have paid a fortune to convert into a movie script.

What started John's mind on this odyssey was a comment Otto made: "The only home water system that will work to clear pathogens from the body must change the properties of water, and subject water to intense ultraviolet radiation and heat by repeatedly recycling that water hundreds of times per gallon—not just once!" Then Lasker said something that chilled Ellis to the bones. "Millions of people will become susceptible to cancer [not because they are genetically predisposed to it but] because when the mixtures of drugs and latent disease markers are flushed into the city's sewer system and end up in the ground water supply, eventually to be reprocessed back into our drinking water supply because water treatment plants use a 'single pass' purification, distillation and filtration system..." Those drinking that water will consume whatever pathogens and waste particles were not filtered by nature nor killed in the purification and distillation process at the treatment facility. Remember, we live in a world that reuses everything. Nature is, itself, the world's greatest recycler. What you drink and expel today will quite possibly be in someone else's cooking pot tomorrow.

\*\*\*\* \*\*

Edward Coty, a Washington Post Foreign Service writer wrote an article on January 27, 1992, page A10 about a "miracle well" in Tlacote, Mexico. His article began: "By the thousands they waited; men, women and children, equipped with plastic jerrycans and tranquil faith in miracles that has adorned Mexican history since pre-Hispanic times.

"The line stretched alongside a dusty road for more than a quarter of a mile one day last week. On other days it strung out for more than a mile as hundreds of thousands of sick and lame line up for the "light water" in Jesus Chahin's well—the miracle water that is said to cure everything from AIDS and cancer to obesity or high cholesterol.

"For me, all of these things are God's miracles," said Mary Guadalupe Aguilar, a Dominican nun who drove 175 miles from Puebla along with a fellow nun and a priest, Father Juan Crespo, who has prostate cancer.

"Chahin, a wealthy rancher, has been making the water available free to the public since May, 1991 ever since he accidentally discovered its healthy properties by observing the swift recovery of a farm dog who had lapped some of it. But Chahin quickly dismissed the reporters continued reference to "miracle water," by explaining he was using distillers purchased from Crystal Clear in the United States, and the "curative power" comes from the constant movement of water from one metal tank (the distillers) to another. Whenever any of those in search of a miracle through references to Christian faith, Chahin said he tells them there's no miracles here, only science.

"But Chahin, a Roman Catholic himself, makes sure when those seeking water speak of miracles, they understand the water has no divine power. "The water is scientific," Chahin told the Washington Post, but man is God's creation."

Millions of people go to John Ellis.com every year. Thousands of people buy one or more of the Crystal Clear™ distillers that permanently turns the bond angle of his water from 104° to 114°, or they buy gallons and gallons of his water. For that reason, Crystal Clear™ is now the best known distillers in the world. And, for that same reason, sooner or later someone who needs John Ellis water™ for something other than drinking would read the John Ellis™ ads and apply John's water for some other scientific application. All scientific advances begin with curiosity.

The curious person was David Davies, CEO of Powergate Technologies, LLC which has been researching and developing HHO (hydrogen-hydrogen-oxygen) hybrid conversion systems for trucks and cars since late 2007. Powergate's current hybrid system adds 25% to 35% gains in fuel mileage. In addition to creating a fuel-efficient HHO conversion hit for cars and trucks, Powergate is also perfecting a zero-pollution, extremely efficient home heating and cooling system that burns HHO generated from tap water. Add to that the possibility of buying an HHO electric generator that serves as a back-up system to your power company's electrical system.

Okay, now you're curious. What would Davies want with John Ellis' 114° bond angle water, the stuff you drink? Davies discovered that the properties about John Ellis™ water, that makes thousands of American homes buy his water, may well work in an entirely different application. It might even be the key to something called "cold fusion." John Ellis™ water may well be the catalyst that makes cold fusion really work.

Davies, like scores of other HHO developers was quick to grab what information they could from the late Stanley Meyers 44 patents on HHO technology when the patents expired after Meyers' death in 1997. Meyers claimed to have perfected the science behind HHO powered automobiles which is like claiming you have perfected Cold Fusion) by producing 300% more energy than the electricity required to generate the hydrogen needed to operate the vehicle from water. Meyers was a deliberately obscure inventor who equipped his dune buggy with a HHO fuel system and ran it on nothing but tap water for three years.

**As Meyers continued to defend his statements of generating 300% more energy than the electricity consumed to create it, scientists continued to refute his claims by saying an over-unity device was impossible. To prove he was correct, Meyers subjected his patents to three years of rigorous testing by the US Patent Office, proving beyond a shadow of a doubt that his HHO invention really worked. The one problem with Meyers' work is that because he constantly feared someone would steal it, he cloaked his discoveries and methods in obscure terminology that he simply made up to protect his work. He used that created terminology in his patent applications, keeping his code secret. Meyers' Water Fuel Cell, a variation of which is now being used by Davies and everyone else experimenting with HHO, was subjected to three years of testing by the Patent Office and Meyers claims have been substantiated.**

Davies had one problem with his invention—he couldn't achieve the 300-to-1 ratio Meyers claimed in his notes. In Meyers' notes, Davies observed the question Meyers asked himself: "How do we switch off the covalent bond of the water molecule, and do it economically?" He answered himself: "We need a way to switch off the bonds and not process the water molecule in any way. Normally the oxygen atom has 8 protons and 8 electrons.

But when the oxygen atom accepts the negatively charged hydrogen electron there is an electrical imbalance. The oxygen atom still has 8 protons, but because of the hydrogen atoms, it has 10 electrons. Meyers realized that because there is no electromagnetic field between hydrogen and oxygen, all he had to do was reverse the electrolysis process. Under Newton's second law, all Meyers had to do was set up opposite electrical charges to make the positive field attract the negative charge. The positive field, according to Coulombs Law, would repel the positive charge and the positive field would then attract the negative charge. When Meyers' patent clerk realized Meyers was describing a form of cold fusion in his patent application, he said: "Why in the world did no one ever think of this?" I think someone did. His name was Michael Faraday.

Faraday may have theorized cold fusion in the early 1800s, long before the technology to achieve it existed. Meyers may have achieved the concept in 1997, but David Davies wasn't getting the results he wanted.

On April 23, 2013 John Ellis™ received a fax from David Davies concerning what the as many as 10,000 pilgrims a day carrying their jerrycans to Jesus Chahin's well called "miracle water." Davies needs some "exceptional" water. In his fax, Davies said:

"I've been researching and building hydrogen generators for big trucks since 2007. So, when a friend of mine sent me a copy of the John Ellis™ water advertisement from a magazine I went ahead and requested a free sample of John Ellis™ water to test with my new HHO (hydrogen-hydrogen-oxygen) cell design.

**"After mixing KOH and well water for the electrolyte, I connected my cell to my Pulse Width Modulator that pulses energy from a 12-volt battery. As suspected, the amps shot up to over 35 amps blowing a few 30 amp fuses. So, I added two cups of hydrogen peroxide to dilute the electrolyte. "The cell had excellent HHO output and the amperage immediately dropped a little bit down to 29 to 30 amp range where it remained. Every day I ran the cell for about 15 minutes and the amps remained in the same 29 to 30 range.**

Then my 4 oz. free sample of John Ellis™ water arrived so I put 10 drops of the water into the electrolyte. I continued to run the cell several times a day for 15 to 30 minutes and, to my surprise, the amperage kept getting lower. It was using less of the battery's power to make hydrogen. A couple of days later the cell was still producing lots of HHO. But the amps had dropped to about 15 amps, then to 12, then to 7.5 amps. So, I decided if a little more John Ellis™ water could make the electrolysis so efficient, I would add another 10 drops. The amps continued to drop. I was dumbfounded. My electronic engineer said there had to be something wrong with my ammeter or I messed up my experiment somehow. After seven days of testing, it remained steady at 1 amp—but the HHO output was the same as when the cell required 33 amps.

Today, I decided to save the electrolyte with the John Ellis™ water and use it to test a brand new cell in case there was something defective with the original test cell. To my total amazement, the cell began to produce lots of HHO as it was "broken in"...but the amps dropped from one amp to an indicated zero amps. The ammeter goes up to 60 amps so the calibrations are coarse, but even so, my new cell is using no more than 1/2 amp to produce lots of HHO.

As a researcher who devotes all of his time in the study of using water for the fuel process, this appears to be a breakthrough since I'm producing abundant HHO (lots of energy when burned), using almost no electrical power to generate the HHO fuel. This is the cleanest energy on the planet since the only emissions when HHO is burned is pure H<sub>2</sub>O. If the John Ellis™ water is used with my new cell design, fuel mileage will go way up. The HHO can also be used to heat and power your home because they are no harmful emissions, and it is so efficient the device, using John Ellis™ water as a booster, consumes very little Electricity."

Each new discovery man makes is a new first step of a new journey to even more important discoveries. Stanley Meyers started the journey that David Davies now walks. Davies footsteps just crossed paths with the footsteps of engineer and scientist John Ellis who discovered that H<sub>2</sub>O with a bond angle of 114° instead of 104° permanently alters water and makes HHO burn a hundred times more efficiently.

About the same time Davies was starting Powergate, Dennis J. Klein of Clearwater, Florida formed his own company, also in the footsteps of Stanley Meyers' genius. His company is called Hydrogen Technologies Applications, He is also using HHO to power cars. He branded his product as Aquygen® gas (a new spelling for the word "oxygen.") Klein converted his Ford Escort to use HHO. He calls his hybrid HHO system HHOS for "a hybrid hydrogen-oxygen system."

What makes Klein's HHO application interesting is that after converting his Escort into a HHO hybrid, he began experimenting with other applications for HHO gas. Klein converted a normal acetylene torch into a HHO torch. When he lights up the torch, he can place his bare fingers at the metal tip of the torch just below the flame—and it remains cool to the touch. Yet the flame of the torch is so hot it will immediately cut a building brick in half with a heat comparable to the heat of the sun. The heat was so intense, it took only seconds to burn a hole completely through a cannonball-sized piece of charcoal. Three seconds turned a brass ball into a glowing sphere and tungsten lights up like a fluorescent tube. Steel slices on contact. Yet, the instant Klein turned off the torch, it was still cool to the touch. That is Cold Fusion.

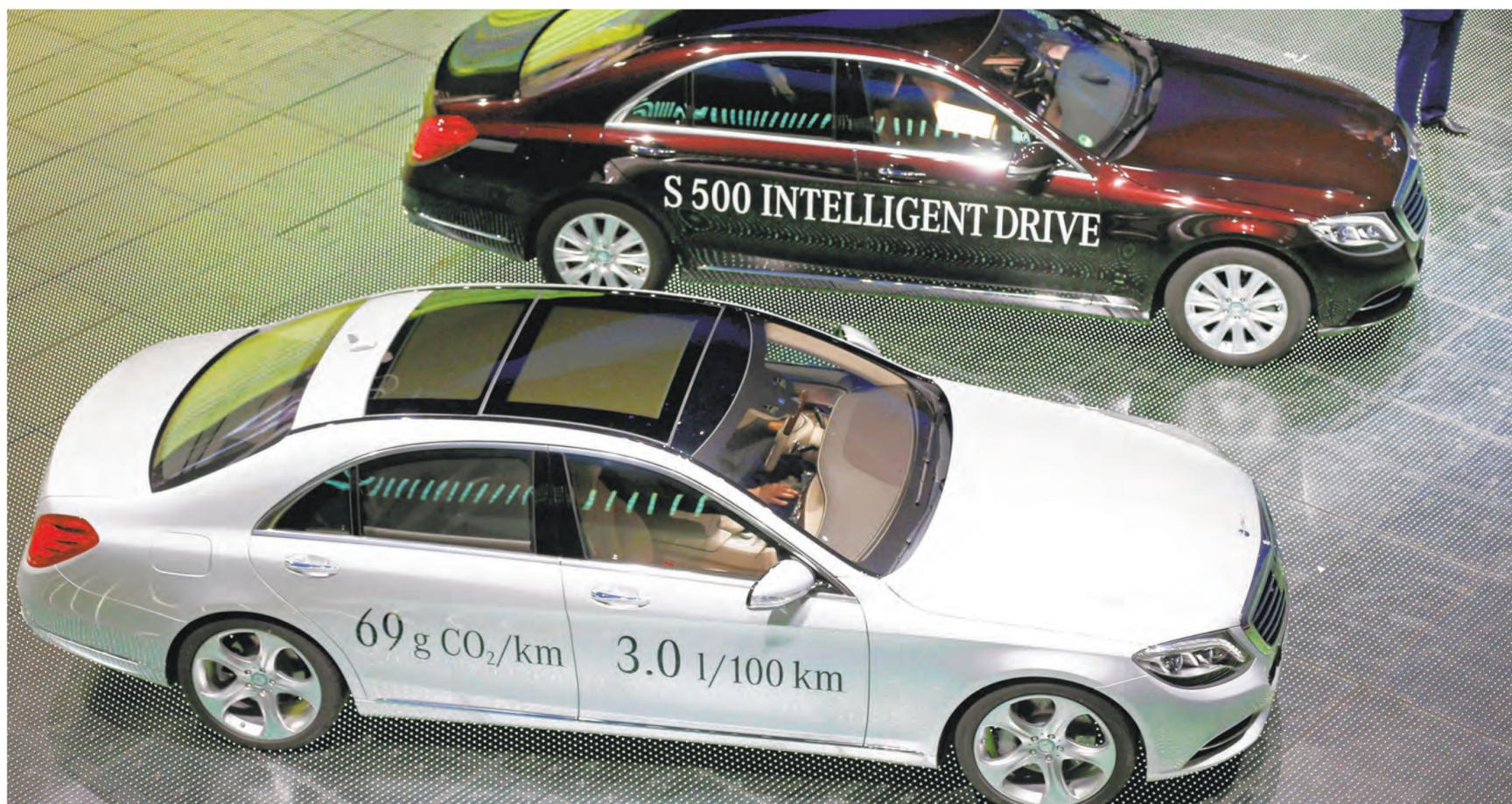
If Cold Fusion has been around since before 1997, why are our cars powered by gasoline, and our homes heated, cooled and lighted by coal and oil? Because, until David Davies put ten drops of John Ellis' 114° bond angle H<sub>2</sub>O in the hydrogen cell he was experimenting with, HHO consumed too much of the power it produced while creating it. **But it just may be that the world's purest and most pathogen-free drinking water just may be the key to Cold Fusion. In fact, if you really think about it, when you look at the John Ellis water™ for drinking, you could probably call it "cold fusion for the body."**

## About John Ellis Water® ....

The 82 year old inventor is a Choate School and Lafayette College Engineering graduate. At just 17 years old, he invented a scientific measuring device that is still used worldwide. After working as an Oil Well Engineer, a Design Engineer at Douglas Aerospace and Honeywell Engineer, he started his own business at age 30 and invented a switch that operates (on-off) within .0001 of an inch. Honeywell and Military/Industrial users say, "He's the only person that knows how to produce it!" Likewise, textbook sciences claim "you can't change water properties" but **John Ellis HAS changed the properties of water...for the benefit of all mankind!**



**LISTEN TO A TOLL FREE RECORDING AT 1-800-433-9553**  
**Watch a video online of John Ellis, 82 year old Inventor • [www.WaterCuresAnything.com](http://www.WaterCuresAnything.com)**



ASSOCIATED PRESS

The new Mercedes S-Class plug-in hybrid, bottom, with a fuel consumption of 78.4 mpg and the autonomous driving S500 Intelligent Drive are presented by Mercedes car development head Thomas Weber during the first press day of the 65th Frankfurt Auto Show in Frankfurt, Germany.

By BEN WOLFGANG  
THE WASHINGTON TIMES

## Historic fuel standards within reach, but consumers may pay the price

The Obama administration's historic fuel-economy requirements likely will bring benefits to American motorists, chief among them less time and money spent at the gas pump.

But some analysts fear the standards, which call for an average of 54.5 miles per gallon by 2025, could carry unintended consequences and already may be stifling innovation and competition between auto manufacturers.

"It's preventing automakers from giving consumers the most fuel-efficient choices today," said Dave Sullivan, manager of product analysis at AutoPacific, an automotive marketing and research company.

In addition to the technological challenges of improving fuel economy so dramatically in a little more than a decade, Mr. Sullivan said automakers are confronting one major question: Should they race full-speed ahead now and offer cars with better gas mileage but a higher price tag, or wait a few more years and simply keep up with the rest of the market?

"It's like the chicken or the egg. Do they put [vehicles with exceptional fuel economy] out now

and hope consumers will want to buy them, and then the high volumes [of sales] will help reduce the costs? Or do they wait until everybody else has to do it and then it won't look so bad when they jack up the price of the car?" he said. "That is not necessarily the best way of helping the consumer."

The 2025 figure is the latest incarnation of the Corporate Average Fuel Efficiency standards first established in the late 1970s, following the U.S. oil crisis.

In 1979, the federal government began requiring cars to get 18 mpg. In the 1980s, that number increased to 27 mpg.

After several other hikes in the interim, President Obama came to office and issued new rules

calling on cars to get 35.5 mpg on average by 2016, a smaller target on the way to 54.5 mpg.

Never before has Washington called on carmakers to make such a dramatic jump.

"This is a lot longer of a climb. It's a marathon now," said Kevin Riddell, a powertrain analyst at the auto research firm LMC Automotive.

The standards themselves — jointly agreed on by the federal government, environmental groups, the United Auto Workers and car manufacturers — are a bit more complicated than they seem on the surface.

The 54.5 mpg target refers to a "fleet average" among all of a company's models, meaning some vehicles likely will get upwards of 60 mpg while

large trucks or SUVs will get far less.

Furthermore, the regulations differ in technical terms from the formulas used by the Environmental Protection Agency to determine miles per gallon sticker numbers.

"In terms of what the consumer will see, I think it's probably 36 mpg combined. That's what you'll see on the window sticker on average," Mr. Sullivan said.

The administration touts the fact that the dramatic rise in fuel economy will save families more than \$8,000 over the life of a vehicle, simply because they buy less gas.

From a carmaker's perspective, big vehicles with relatively bad gas mileage will remain a part of the portfolio, but they'll be joined in showrooms by much smaller, more fuel-efficient vehicles that will help companies meet the federal requirements.

Auto manufacturers also may adjust what they consider to be their flagship or "halo" models, according to Mr. Riddell.

"In the past, your halo model might have been the Hemi Charger with a 6.1 liter engine, supercharged. A real beast," he said, adding companies instead may begin to center their business models and marketing campaigns around much smaller cars.

## In-car tech to pursue drivers in 2014 and beyond

By MARK A. KELLNER  
THE WASHINGTON TIMES

Not that long ago, drivers could get behind the wheel, start the engine and cruise down a country road, immune to the world's distractions, unless they chose to turn on the (AM/FM) radio or pop in a cassette tape.

Those days are long gone, as anyone who's observed motorists with a smartphone all-but-glued to the side

of their heads or, worse still, trying to text and drive, can attest.

Today, many vehicle manufacturers, as well as aftermarket car stereo makers, offer systems that integrate a smartphone into the mix, allowing users to make and receive phone calls, hear text messages "read" to them via a computerized voice and, in some cases, view and hear GPS-based directions from a native or add-on mapping program. Juggling the device while

concentrating on driving is, to say the least, hazardous, and often illegal.

But what if those interactions could be made more safely? That's the goal of two development efforts undertaken by companies well known for duking it out in the marketplace: Apple Inc. and Google.

Over the past couple of years, Google's Android operating system, found chiefly on smartphones and tablet computing devices, has grown

to rival Apple's iOS, which is found on the iPod music player, iPhone smartphone and the iPad tablet. The Google-sponsored Open Automotive Alliance, or OAA, claims "the Android ecosystem ... has seen over one billion devices activated to date." In September, Apple said the 700 millionth iOS device will have been shipped, a number that may well have been surpassed during a 2013 Christmas season that saw Apple's products among the few winners. (At

the start of 2013, Apple told financial analysts it expected to sell 1 billion iOS devices by 2015.)

What is envisioned for the "techno-car" front end? On the Apple side, the firm has bold plans for what it calls "iOS in the Car," in which the operating system behind the iPhone can be controlled from the dashboard, or even the steering wheel.

» see CAR TECH | D6

# Incredible Winter Window Sale

- ✓ A typical home in the DC area can **save 10% a year** on their energy bills if they replace their single-pane windows with **Thompson Creek windows\***
- ✓ Add **beauty, comfort and value** to your home
- ✓ Fortify your home with our stronger, safer windows
- ✓ Buy direct to eliminate the middleman
- ✓ Our **expert installation** is backed by our double lifetime guarantee

\$150

UP TO

INSTANT REBATE

PER WINDOW\*\*



**Toll-FREE 7 DAYS A WEEK 1-877-816-7474**  
Call NOW for a FREE no-obligation price quote! [www.thompsoncreek.com](http://www.thompsoncreek.com)



**THOMPSON CREEK®**  
WINDOW COMPANY

\*Savings estimates are based on a typical home and are not a guarantee of savings for a specific home. Energy estimates are derived from the NAPAC WISE Project. Visit Thompsoncreek.com/wise.aspx for details. \*\*\$100 instant rebate per window when you replace up to 6-10 windows and \$150 instant rebate per window when you replace 11 or more windows. All purchase prices to be calculated prior to application of discount. Not valid with any other advertised or unadvertised discounts or promotions. Limit of one discount per purchase contract. Void where prohibited by law or regulation. Offer has no cash value and is open to new customers only. Offer may be cancelled without prior notice. Offer expires 1/31/14. Copyright © 2014 Thompson Creek Window Company. All rights reserved. Licensed: MHIC#125294, VA#2705-117858-A, DC PERM # 8246

# Electric car technology all the buzz

By Kellan Howell  
THE WASHINGTON TIMES

With rising demand for fuel-efficient and environmentally conscious vehicles and the popularity of electric cars, auto enthusiasts can expect to see innovations for battery-operated cars at the Washington Auto Show.

Top trends this year, according to Navigant Research, are more competitively priced electric cars, more infrastructure to support the growing electric auto trend, wireless charging capabilities, and the rise of electric motorcycles.

The Society of Automotive Engineers has agreed on a set frequency with three power levels that will standardize the wireless charging systems, a quality that plug-in chargers have lacked. Evatran and Bosch's Plug Less Power unit, which is available for the Nissan LEAF and Chevy Volt, has hit the market and will be followed by similar systems for Toyota and Gualcomm Halo.

There also is the potential for competition between battery-operated electric car models and cars that operate on clean-energy hydrogen fuel cells. The difference between the two systems is where the energy to run the car is created. While battery-operated cars get their energy from off-site locations, fuel cell systems produce energy within the car and are noted for having the cleanest emissions, releasing only water vapor. However, these systems have a long way to go before they are available on the market at an affordable price.

Audi, Cadillac, Ford, Nissan and Toyota will showcase their latest electric cars at the Washington Auto Show.

"Our first version in the U.S. will be the A3 Sportback e-tron, which is a plug-in hybrid car. It arrives in the U.S. by 2015. There are other e-tron models being considered beyond that, but no firm decisions on timing yet," said Audi spokesman Brad Stertz.

The Department of Energy is working on building more charging stations for electric cars and has provided a map locating the nearly 7,000 public and commercial charging stations across the county. The department also has created The Workplace Charging Challenge, which is aimed at increasing the number of employers offering charging tenfold over the next five years.

The Chevy Volt and Toyota Prius are some of the top selling electric cars on the market, but it's the new American electric car company Tesla that has been making headlines. Navigant research predicts that Tesla will be the company to watch this year.

Tesla has had a rocky past few months because of three battery fires in Model S cars. However, the Model S became Consumer Reports' highest-scoring car ever.

Connecticut-based Litchfield Hills Research analyst Theodore O'Neill told the Detroit Free Press that Tesla's battery strategy sets it apart from other battery-operated car manufacturers.

"Tesla's strategy of using thousands of small batteries stands in stark contrast to GM's strategy of stringing together dozens of 'New York City Yellow Pages'-style batteries into one larger battery pack," he said.

Tesla CEO Elon Musk has promised to enable Tesla drivers to travel across the country free of charge with the use of new Model S supercharger stations expected to be completed this year. The promise comes with a lofty price tag. Navigant research estimates it will cost at least \$62 million for Mr. Musk to fulfill his promise to cover 80 percent of the U.S. population with the charging stations this year.

## FUTURE

From page D2

than 50 miles or 60 miles in a given day, making practical a plug-in electric vehicle such as Nissan Leaf, Honda Fit or other, more expensive models such as those offered by Tesla.

Indeed, those and other vehicles in theory offer the battery life most Americans would need on most days. The Leaf can manage more than 100 miles on a charge, according to Nissan. Honda boasts the Fit can get 82 miles.

Tesla's Model S can get more than 260 miles on a single charge, though the cheapest version of the car starts at more than \$60,000.

The Fit, by comparison, has a suggested retail price of about \$36,000 while the Leaf starts at about \$29,000 before federal tax credits.

Beyond the price tags, most electric vehicles simply aren't an option for lengthy trips or for Americans who have exceptionally long commutes to and from work every day and lack access to recharging stations.

"What the automakers really want is people to live closer to their jobs," Mr. Riddell said.

Companies such as Tesla are addressing the problem by constructing networks of charging stations, where motorists can stop and replenish their car's battery in under an hour.

On Jan. 14, such a station opened in Blanding, Utah, complete with four charging stalls that can refill a Tesla Model S battery to half-power in just 20 minutes, The Salt Lake Tribune reported.

Such stations are expected to become more common over the new few years, though Ms. Lipman and other supporters argue the electric vehicle infrastructure already is better than that of gasoline-powered cars.

"In some sense, we have a better charging infrastructure for electricity than we do for gasoline, given that every single home has an outlet in it right now," she said.

### MARYLAND

#### ANNE ARUNDEL COUNTY

**Brookwood Run - Severn**  
FROM THE \$470s - SINGLE FAMILY HOMES  
MODEL GRAND OPENING! QUICK DELIVERIES!  
703 Blackhorse Trail, Severn, MD 21144  
GPS Address: 8080 Quarterfield Rd., Severn, MD 21144 (VFW) (301) 683-6381

**The Pointe at Arundel Preserve - Hanover**  
FROM THE \$300s - GARAGE TOWNHOMES  
MODEL GRAND OPENING! QUICK DELIVERIES!  
SPECIAL FINANCING - WON'T LAST LONG!  
7781 Milestone Parkway, Hanover, MD 21076 (301) 683-6402

**Cottonwood - Severn**  
FROM THE \$400s - SINGLE FAMILY HOMES  
PRE-MODEL PRICING! NOW SELLING BY APPOINTMENT ONLY!  
1228 Bradley Road, Severn, MD 21144  
GPS Address: 8043 Clark Station Rd., Severn, MD 21144 (240) 508-3364

#### BALTIMORE COUNTY

**Grantleigh Station - Middle River**  
FROM THE LOW \$300s - SINGLE FAMILY HOMES - QUICK DELIVERIES!  
HOMES WITH SPECIAL PRICING FROM THE UPPER \$200s - WON'T LAST LONG!  
826 Salvatore Road, Baltimore, MD 21220  
GPS Address: 835 Wampler Road, Baltimore, MD 21220 (301) 683-6385

**Timber Run - Reisterstown**  
FROM THE \$500s MODEL GRAND OPENING! LARGE 1-ACRE HOMESITES!  
SALES BY APPOINTMENT ONLY!  
1 Launic Road, Reisterstown, MD 21136  
GPS Address: 1200 Nicodemus Road, Reisterstown, MD 21136 (800) 348-2308

**Mardella Ridge - Randallstown/Woodstock**  
FROM THE \$400s - SINGLE FAMILY HOMES  
NOW SELLING WITH PRE-MODEL PRICING! BY APPOINTMENT ONLY!  
3126 Persimmon Tree Court, Woodstock, MD 21163 (855) 343-9451

**Devonport - Essex**  
FROM THE \$300s - LUXURY GARAGE TOWNHOMES  
WATERFRONT COMMUNITY! COMING SOON!  
GPS Address: 1978 Old Eastern Avenue, Essex, MD 21221  
To join our VIP list please call. (855) 897-5510

**Admirals Landing - Dundalk**  
FROM THE \$200s - GARAGE TOWNHOMES - COMING SOON!  
GPS Address: 4001 North Point Blvd., Dundalk, MD 21222  
To join our VIP list please call. (855) 897-5511

#### HOWARD COUNTY

**Belle Haven - Glenwood**  
FROM THE UPPER \$600s - SINGLE FAMILY HOMES  
MODEL GRAND OPENING!  
2803 Bridalwreath Court, Glenwood, MD 21797  
GPS Address: 15353 Union Chapel Rd., Glenwood, MD 21797 (301) 683-6377

**Meriwether Farm - Glenelg**  
FROM THE UPPER \$700s - SINGLE FAMILY HOMES  
NOW SELLING FROM BELLE HAVEN!  
15029 Double Bridges Court, Glenelg, MD 21797  
GPS Address: 15102 Roxbury Drive, Glenelg, MD 21737 (301) 683-6377

**Hanover Manor Crossing - Hanover**  
FROM THE MID \$400s - SINGLE FAMILY HOMES  
COMING SOON!  
GPS Address: 6168 Hanover Road, Elkridge, MD 21076  
To join our VIP list please call. (888) 897-5518

#### MONTGOMERY COUNTY

**The Vistas at Quince Orchard Park - Gaithersburg**  
FROM THE UPPER \$500s - LUXURY GARAGE TOWNHOMES  
MODEL GRAND OPENING! QUICK DELIVERIES!  
189 Autumn View Drive, Gaithersburg, MD 20878  
GPS Address: 200 Winter Walk Drive, Gaithersburg, MD 20878 (301) 683-6399

**The Towns of Tanglewood - Silver Spring**  
FROM THE MID \$300s - GARAGE TOWNHOMES  
PRE-MODEL PRICES NOW SELLING BY APPOINTMENT ONLY!  
13235 Guilford Run Lane, Silver Spring, MD 20904  
GPS Address: 13311 Dogwood Drive, Silver Spring, MD 20904 (301) 683-6400

#### ST. MARY'S COUNTY

**Pembroke - Lexington Park**  
FROM THE LOW \$300s - SINGLE FAMILY HOMES  
NOW SELLING BY APPOINTMENT ONLY!  
To join our VIP list please call. (301) 683-6436

#### PRINCE GEORGE'S COUNTY

**The Enclave at Chaddsford**  
FROM THE MID \$300s - SINGLE FAMILY HOMES  
15419 Pulaski Road, Brandywine, MD 20613 (301) 683-6388

**The Glen at Chaddsford**  
FROM THE LOW \$300s - SINGLE FAMILY HOMES  
NOW SELLING FROM THE ENCLAVE AT CHADDSFORD.  
15419 Pulaski Road, Brandywine, MD 20613 (301) 683-6388

**Villages at Peppermill - Capitol Heights**  
FROM THE MID \$200s - GARAGE TOWNHOMES  
28 Cindy Lane, Capitol Heights, MD 20743 (301) 808-0514

**Dixon Crossing - Bowie**  
FROM THE UPPER \$400s - SINGLE FAMILY HOMES  
QUICK DELIVERIES! MOVE IN FOR THE NEW YEAR!  
13709 Sweet Emily Court, Bowie, MD 20720  
GPS Address: 5510 Church Road, Bowie, MD 20720 (301) 683-6396

**Lakeview at Brandywine**  
FROM THE UPPER \$400s - SINGLE FAMILY HOMES  
GRAND CLOSEOUT! QUICK DELIVERIES! MOVE IN FOR THE NEW YEAR!  
14536 Owings Avenue, Brandywine, MD 20613 (301) 782-7461

**Belmont Crest - Upper Marlboro**  
FROM THE UPPER \$400s - SINGLE FAMILY HOMES  
5616 Walter Herrera Way, Upper Marlboro, MD 20772 (301) 856-8358

**Waterford Estates - Bowie**  
FROM THE LOW \$600s - SINGLE FAMILY HOMES ON ACREAGE  
NOW SELLING! MODEL GRAND OPENING!  
12901 Contee Manor Road, Bowie, MD 20721 (301) 683-6375

**DELAWARE - khov.com/Delaware**  
**SUSSEX COUNTY**  
**The Villages at Red Mill Pond - Lewes**  
FROM THE MID \$200s - SINGLE FAMILY HOMES  
DIRECT WATER ACCESS! NEW SECTION UNDERWAY!  
17928 Torry Pines Place, Lewes, DE 19958 (888) 772-8989

**Plantation Lakes - Millsboro**  
FROM THE LOW \$200s - SINGLE FAMILY HOMES  
INCREDIBLE GOLF COURSE COMMUNITY WITH GREAT AMENITIES!  
NOW SELLING FROM THE VILLAGES AT RED MILL POND!  
khov.com/PlantationLakes (888) 772-8989

Also Building in Coastal NC, SC & GA. Visit khov.com for details!

### WEST VIRGINIA

#### JEFFERSON COUNTY

**Huntfield - Charles Town, WV**  
SINGLE FAMILY HOMES - COMING SOON!  
khov.com/Huntfield (888) 565-7201

### VIRGINIA

#### LOUDOUN COUNTY

**Evergreen Reserve - Ashburn**  
STARTING FROM \$1.3 MILLION\*  
EXCLUSIVE ENCLAVE OF 2-7 ACRE HOMESITES!  
22460 Conservancy Drive, Ashburn, VA 20148 (888) 530-3586

**River Pointe - Leesburg**  
FROM THE MID \$300s  
LUXURY GARAGE TOWNHOMES - QUICK DELIVERIES!  
1769 Moultrie Terrace NE, Leesburg, VA 20176 (888) 559-1544

**FROM THE MID \$500s**  
EXECUTIVE SINGLE FAMILY HOMES - QUICK DELIVERIES!  
1902 Belleville Drive, NE, Leesburg, VA 20176 (866) 910-3740

**FROM THE MID \$600s**  
ESTATE SINGLE FAMILY HOMES  
1003 Menlow Drive, NE, Leesburg, VA 20176 (888) 592-8951

**Woodmar Farm - Purcellville**  
FROM THE MID \$400s - EXECUTIVE SINGLE FAMILY HOMES  
1/2+ ACRE HOMESITES!  
36616 Woodmar Farm Drive, Purcellville, VA 20132 (888) 467-6294

**Willowsford - Ashburn**  
FROM THE LOW \$600s - SINGLE FAMILY HOMES  
#1 COMMUNITY IN AMERICA (NAHB).  
23510 Founders Drive, Ashburn, VA 20148 (888) 559-1536

**Mountain Valley at The Villages at Round Hill**  
FROM THE UPPER \$300s - SINGLE FAMILY HOMES  
35555 Saint James Drive, Round Hill, VA 20141 (866) 910-3743

**Waterford View Estates - Lovettsville**  
FROM THE LOW \$500s - SINGLE FAMILY HOMES ON 3+ ACRE HOMESITES  
DECORATED MODEL NOW OPEN!  
13351 Waterford View Court, Lovettsville, VA 20180 (866) 532-7293

**Reserves at Wheatlands**  
FROM THE MID \$500s - SINGLE FAMILY HOMES ON 1+ ACRE HOMESITES.  
NOW SELLING BY APPOINTMENT ONLY!  
khov.com/Wheatlands (888) 311-8609

**Lenah Woods**  
SINGLE FAMILY HOMES ON WOODED LOTS - COMING SOON!  
khov.com/LenahWoods (888) 311-8620

#### FAIRFAX COUNTY

**Discovery Square - Herndon**  
LUXURY CONDOMINIUMS - COMING SOON!  
khov.com/DiscoverySquare (866) 910-3760

#### PRINCE WILLIAM COUNTY

**Eagles Pointe - Woodbridge**  
FROM THE LOW \$400s - EXECUTIVE SINGLE FAMILY HOMES  
16374 Kramer Estates Drive, Woodbridge, VA 22191 (888) 506-3303

**FROM THE UPPER \$300s - VILLA HOMES**  
3205 Eagle Ridge Drive, Woodbridge, VA 22191 (888) 884-1402

**Meadows at Hope Hill Crossing**  
FROM THE MID \$400s - SINGLE FAMILY HOMES  
DECORATED MODEL NOW OPEN!  
14956 Spriggs Tree Lane, Woodbridge, VA 22193 (888) 311-8613

**Dominion Crossing - Manassas**  
FROM THE UPPER \$200s - GARAGE TOWNHOMES  
4 DECORATED MODELS NOW OPEN!  
9121 Jefferson Court, Manassas Park, VA 22111 (866) 823-8852

#### STAFFORD COUNTY

**Seasons Landing - Stafford**  
FROM THE MID \$300s - SINGLE FAMILY HOMES  
NEW SECTION NOW SELLING!  
48 Snow Drive, Stafford, VA 22554 (866) 407-3806

**Leeland Station - Stafford**  
FROM THE UPPER \$200s - SINGLE FAMILY HOMES  
QUICK DELIVERIES!  
5 Perth Drive, Fredericksburg, VA 22405 (888) 559-1541

**Brittany Estates**  
FROM THE MID \$400s - SINGLE FAMILY HOMES ON 3+ ACRE HOMESITES  
NOW SELLING BY APPOINTMENT ONLY!  
(866) 407-3928

**Embrey Mill**  
FROM THE UPPER \$300s - SINGLE FAMILY HOMES.  
DECORATED MODEL NOW OPEN!  
400 Apricot Street, Stafford, VA 22554 (866) 823-8852

#### CULPEPER COUNTY

**Pelham's Reach - Culpeper**  
FROM THE LOW \$200s - SINGLE FAMILY HOMES  
DECORATED MODEL NOW OPEN!  
581 Homeplace Drive, Culpeper VA 22701 (888) 302-3769

**If You're Not 55, You'll Wish You Were®**

**K. HOVNANIAN'S FOUR SEASONS**  
An Active Adult Community

**NEW KENT COUNTY, VA**

**K. Hovnanian's® Four Seasons - New Kent Vineyards**  
FROM THE LOW \$200s SINGLE FAMILY HOMES  
NOW SELLING! POOL OPENING SUMMER 2014!  
7723 Rockbridge Run Place, New Kent, VA 23124 (866) 407-3811

**NEW CASTLE COUNTY, DE**

**K. Hovnanian's® Four Seasons - Silver Maple**  
FROM THE MID \$270s - SINGLE FAMILY HOMES  
BEST SELLING ACTIVE ADULT COMMUNITY!  
870 Bayview Road, Middletown, DE 19709 (888) 507-4583  
For those 55 or better. No permanent residents under age 19.

Open Hours: Mon. 2pm-6pm, Tues. - Sun. 10am - 6pm.  
Brokers Warmly Welcomed.\*\*

**K. Hovnanian**  
American Mortgage, L.L.C.

Nature Technology Efficiency

EQUAL HOUSING OPPORTUNITY

khov.com/besocial

\*Prices, terms, features, incentives and savings subject to change without notice. See Sales Consultant for details. \*\*Visit khov4rewards.com for more information on our Realtor Rewards Program. K. Hovnanian® American Mortgage, L.L.C.™, 3601 Quantum Boulevard, Boynton Beach, FL 33426. NMLS#3259. (www.nmlsconsumeraccess.org). Licensed by the Virginia State Corporation Commission #MC2661. Licensed by the Maryland Commissioner of Financial Regulation. Licensed by the Delaware Office of the State Bank Commissioner. MD MHB#3149, 6928, 6943. Licensed by the State of West Virginia Division of Banking.

khov.com/PresidentsDay

# Auto show head giving up the driver's seat

By MEREDITH SOMERS  
THE WASHINGTON TIMES

The Washington Auto Show has displayed "horseless carriages," hands-free steering and every bell and whistle in between on its showroom floors, and Gerard Murphy has been a witness to much of what's come down the road.

For 20 years Mr. Murphy has produced the auto show and for 30 years he's led the Washington Area New Automobile Dealers Association, but this year is the last time he'll get behind the wheel.

"I've been doing this a long time. I've greatly enjoyed it. Obviously it's very much a part of me," Mr. Murphy said from his office in Friendship Heights. "I'm trained as a lawyer. I like to write, I like to organize things, but I also know in the association business, that people can overstay their time. I decided [that I] wanted to go out on top of my game."

Mr. Murphy, 63, said he'll step down from his position in July, though he'll help to transition John O'Donnell, the association's executive vice president, into the role.

"I followed my father into this business. He followed his father. I'm a third generation in this role," Mr. Murphy said. "That's not uncommon in the automobile business. My grandfather was an automobile dealer in the 1920s. He was selling Oaklands, the forerunner for Pontiacs."

For his part, Mr. O'Donnell said he is excited about taking the helm, but a bit nervous.

"I'll be the first non-Murphy to guide the association in three generations," the 46-year-old said. "I owe a tremendous amount to Gerry Murphy. At the time that Gerry hired me, I took less money to work for him, because I knew exactly what I was getting into."

From 1917, when the association was established, until 1932, the group was more like a rotary club, Mr. Murphy said. In 1932 his grandfather became a staffer, and his son — Mr. Murphy's father — joined the automobile business after fighting in World War II.

"In my case, I came out of the University of Maryland and went to work here at the association, which I'd done in a summer or two. I worked with my father for eight or nine years, it was kind of an understudy job. And my dad stepped out in the early 1980s."

Mr. Murphy graduated from the University of Maryland in 1975 with a masters in public policy before getting his law degree in 1980 from George Mason University School of Law.

"It did happen to work out," he said. "This kind of a job, an association management job, is a lot like being a politician. You have political action that is the underpinning for government relations. If you don't support the people running for office, they don't know who you are

when you come to get done what needs to get done."

To do that, Mr. Murphy relies on the support of his organization.

"The Washington Area New Automobile Dealers Association is the dealer organization, the trade group, in the metropolitan Washington automobile retail market that represents the dealers in the public policy process, and the media," he said. "It's charge, as it has since it began in 1917, is to promote the automobile business in metropolitan Washington."

The association got its start in 1917 and expanded out from Washington proper in 1964. Today it reaches dealers in Frederick and Howard counties in Maryland, into Southern Maryland, and into Stafford, Prince William and Loudon counties in Virginia.

Mr. Murphy said the association has about 225 dealership members, along with roughly 75 "kindred line members" such as banks and parts suppliers.

The association is part of the overarching National Automobile Dealers Association, which counts among its members heavy hitters like Greater New York, Greater Detroit, and Greater Cleveland.

One way to stand out among a group of powerhouses is an annual auto show.

"In addition to promoting the automobile business, how do you do that? Through the auto show," Mr. Murphy said. "The auto show is on an upward

trajectory, which is great. We've managed to position it as the public policy show on global industry circuit. Which means that it's one of the major auto shows in the world right now. It's the only auto show in world that has Congress down the street," he said

For decades the show was hosted as a regional event. In 2004, when the convention center opened downtown, the new location gave the show an opportunity to compete on a global level.

"This show, like some of the other major auto shows, is now an industry event," Mr. Murphy said. "You see state-of-the-art advanced technology, the likes of which you don't see in regional auto shows."

Last year a heavy emphasis was placed on cars as an extension of homes and offices, and Mr. Murphy said this year safety is "the watchword."

"Smart cars that will gauge the traffic pattern so you don't get too close to the car in front of you, apply the brakes if you doze off, help you park it so you don't get fender benders," Mr. Murphy said. "The cars are amazing. The onboard technology that's there is so sophisticated."

While completely hands-free cars are still far away, Mr. Murphy said consumers should expect to see a push for smaller, more urban-friendly vehicles.

"More people are returning to the city, or urban style communities," he said. "We are not doing as much highway

driving but you still need a ride."

This year Energy Secretary Ernest Moniz is scheduled to speak, as is Mark Fields, the COO of the Ford Motor Company. Rumor has it that the new Mustang might make an appearance, while visitors can also meet Washington Redskins wide receiver Pierre Andre Garçon, Washington Nationals outfielder Jayson Werth, and even test drive a select number of cars.

This year's show has a feeling of optimism, after a 2013 year that saw a boost in new car sales.

"Ever since the Great Recession of 2009 when new car sales in the U.S. went from 16.5 million in 2007 down to 10 million, which was pretty much of a hit, it's been coming back," Mr. Murphy said. "The thinking is it's gonna be back up around 16 million auto sales in the U.S., which is tremendous."

"It's extraordinary, the auto industry historically is not dissimilar to the housing market, but with the way the economy has been going up and down since recession, cars have pretty much been going in their own direction. Some of that could have had to do with fact that GM and Chrysler were assisted by the federal government ... but the point is that car sales have been a strong component of the economy, not anything that's contributing to unemployment problems and sluggishness we all hear about. That's good news."

## CAR TECH

From page D4

According to the firm's website, "If your vehicle is equipped with iOS in the Car, you can connect your iPhone 5 or later and interact with it using the car's built-in display and controls or Siri Eyes Free. Now you can easily and safely make phone calls, access your music, send and receive messages, get directions, and more."

Apple's promise is to have the iOS in the Car initiative integrate smartphone features and applications such as Apple's Maps program, into a vehicle's display screen.

However, while Apple CEO Tim Cook and Senior Vice President Eddy Cue each took pains to boost the iOS effort at the firm's mid-2013 developer conference, not much has happened since, although a 2014 launch is promised. Mr. Cue touted a range of car makers supposedly behind the Apple plan: Honda/Acura, Mercedes-Benz,

Nissan/Infiniti, Ferrari, Chevrolet/Opel, Kia, Hyundai, Volvo and Jaguar among them, and there are reports that BMW/Mini is also onboard. None have yet been rolled out, however.

The Android-based OAA has its roster of partners, too. A Jan. 6 announcement stated: Audi, GM, Honda and Hyundai are the car makers who've signed on so far, while Google and graphics board NVIDIA are also involved.

"Millions of people are already familiar with Android and use it everyday," said Sundar Pichai, senior vice president of Android, Chrome & Apps at Google, in that statement. "The expansion of the Android platform into automotive will allow our industry partners to more easily integrate mobile technology into cars and offer drivers a familiar, seamless experience so they can focus on the road."

According to Mary Chan, president of General Motors' Global Connected Consumer unit, the OAA effort will present "an ecosystem that spans across vehicles and handheld mobile devices furthers our mission to bring vehicles into our

owners' digital lives and their digital lives into their vehicles."

"We see huge opportunities for the Android platform paired with OnStar 4G LTE connectivity in future Chevrolet, Buick, GMC and Cadillac vehicles," she said.

But as with Apple, there's no definite timeline for product introductions. "Timing from each automaker will vary, but you can expect to see the first cars with Android integration by the end of this year," the OAA announcement said. It didn't say which manufacturers or models would come first.

Along with timing, another unanswered question is whether car buyers will be able to choose between the Android- or Apple-based car systems on their desired vehicle. Each platform has its devoted fans, and there's nothing to suggest that an OAA-based car would be iPhone-friendly, or that an iOS-supporting vehicle would do much with an Android smartphone.

Indeed, industry analyst Rob Enderle of the

Enderle Group in San Jose, said the OAA plan "is a program designed around Android and to promote Android. It directly attacks what was an iOS dominance in the car."

Asked if still more gadgetry behind the wheel could increase the incidence of distracted driving, Mr. Enderle said, "vendor-driven efforts tend to favor technology sales over safety until liability forces them to implement balance." But he noted that makers are aware of the liability factors and "this program starts with the balance that wouldn't otherwise exist."

Perhaps the greatest advantage of having an "auto-tainment" operating system for the car, whether it's iOS or Android, is that both Google and Apple update these operating systems regularly. Mr. Enderle said he looked forward to being able "to better update the in-car systems so that the car I buy is no longer using obsolete technology when I buy it."

• Mark A. Kellner can be reached via email at [mkellner@washingtontimes.com](mailto:mkellner@washingtontimes.com).

# Be a V.I.P.

## Join the Medicare plan that cares.

**1-877-686-1767 (TTY: 1-866-428-7583)**

7 days a week, 8 a.m. to 8 p.m. (Oct. 1-Feb. 14)



AmeriHealth VIP Select is a HMO plan with a Medicare contract. Enrollment in AmeriHealth VIP Select depends on Medicare contract renewal.

Y0093\_PRA\_964\_Accepted\_10232013

# VIEW FROM CAPITOL HILL



## Congress Should Repeal the Renewable Fuel Standard



**By Sen. James Inhofe (R-OK)**  
Represents the state of Oklahoma

In November of last year, the Environment Protection Agency (EPA) proposed reducing the volumetric requirements of the Renewable Fuels Standard (RFS) for 2014. With this announcement, the EPA tacitly acknowledged that the program is irretrievably

broke. But despite this welcome development, deep, structural problems of the RFS remain and are only now rising to the surface of the public's attention.

EPA's action kept the ethanol mandate to below the "blendwall" — or 10 percent of the total fuel supply. The blendwall is significant because if ethanol makes up more than 10 percent of each gallon of gas, it can cause serious damage to car engines and other small motors, to the point automakers have warned that owners of older cars are at a risk of their warranties being voided. Similarly, the Coast Guard has advised boaters to avoid blends of greater than 10 percent.

Consumers recognize the risk too. My state of Oklahoma is full of gasoline stations advertising no-ethanol fuel, which consumers pay premium cost for in order to avoid the ethanol. Unfortunately, the EPA's "fix" only applies

for one year and is complicated by the fact that it will be challenged in court, does not solve the program's long-term structural problems, and does nothing to address the uncertainty that the entire program casts over those who make and consume fuels.

Unless Congress reforms the RFS, industry and consumers will face unclear costs due to the mandate and be forced to place hope in the EPA to keep the RFS's mandated levels below the blendwall each year. A recipe for disaster, this scenario will subject American industries to a continuous cycle of litigation and regulatory uncertainty that will make it even more difficult to make long-term business decisions. Further, it will be impossible for consumers to know that the fuel sold next year will be safe for the cars they buy this year. An unchecked RFS will result in job losses and the potential for the

nation's transportation sector to be subjected to fuels that damage engines both large and small.

At the heart of the mandate's problem is the expansion that was enacted when Democrats controlled Congress in 2007. That law doubled the biofuel production requirement for 2014 and increased it by nearly 5 times for 2022, to a level that is more than three times the safe level of biofuels in gasoline. Additionally, over time the law increasingly relies on advanced and cellulosic biofuels that are either prohibitively expensive or do not exist in order to meet the mandate's demands.

What drove Washington's decision to expand the mandate? In 2007, many in Congress believed that the nation faced a bleak domestic energy future, which seemed certain to include perpetual increases in oil and natural gas imports from unstable regions of the world. While this

narrative convinced many that the RFS was appropriate, the recent turnaround in America's booming domestic energy sector vitiates the argument for the mandate.

In just the last five years, breakthroughs in precision drilling and hydraulic fracturing have birthed an American energy renaissance. Thanks solely to the innovation of the private sector, domestic oil production has increased by 50 percent since 2008 and it shows no sign of slowing down. Just last fall the United States became the single largest producer of oil and natural gas in the world. We could be energy independent tomorrow if the Obama Administration would loosen the reins on developing our natural resources. Our energy security has improved, but it's been in spite of the RFS, not a result of it.

If consumers want a future

of uncertainty, higher gasoline prices, damaged engines, and meager job growth, then we should leave the RFS as it is. If not, then we should repeal the RFS and allow ethanol and other biofuels to compete on a level playing field with all other transportation fuels.

*U.S. Sen. Jim Inhofe is a senior member on the Senate Environment and Public Works Committee and the senior Senator from Oklahoma.*



2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

## Vehicle Technology Paving the Way to Safer Roads



**By Rep. Tom Petri (R-WI)**  
Representing Wisconsin's 6th Congressional District

Innovation continues to move our society forward, and ideas previously thought to be pure science fiction are now a part of our everyday lives.

In the auto industry, vehicle technology is evolving alongside consumer demands for mobile phone connectivity, automation, and better gas efficiency. As a

result, many of the new technologies that are being developed are focused on improving driver awareness, reducing distracted driving, and, consequently, making our roads safer.

Last summer, I had the opportunity to see connected-vehicle technology firsthand in new cars and learn how auto manufacturers are leading the way in developing safer ways to drive and interact with other vehicles on the road. Automatic parallel parking, cross traffic alerts, and blind spot indicators are some of the features already being incorporated in cars to assist drivers and improve awareness. Being able to play music through phone apps, voice commands, or having the car read text messages to the driver are features that significantly reduce distracted driving. Many of these, such as rear view cameras and Bluetooth phone connectivity, are already fast becoming standard.

In November, I chaired a hearing of the House Highways and

Transit Subcommittee on the future of driverless vehicles—another exciting prospect that some predict will hit the roads by 2021. Google, many auto manufacturers, and research universities, such as Carnegie Mellon, have already achieved some success with self-driving vehicles. This discussion spurred many questions: What is the role of government in developing or regulating these technologies? How will infrastructure and laws have to change to accommodate autonomous vehicles? What impact will automation have on jobs?

All are legitimate questions that need to be asked; many will take years to answer.

One of the most obvious advantages of these technologies will be to reduce accidents, injuries, and fatalities on the road. Human driver error is a contributing factor in almost 90 percent of crashes. Reducing this figure could therefore not only make our roads safer, but also reduce traffic congestion, improve fuel

efficiency, and extend vehicle life. According to the Eno Center for Transportation, a 50 percent penetration of the market with self-driving vehicles would save almost 10,000 lives per year, highway lane capacity would increase by 21 percent, and fuel consumption would be cut by 224 million gallons per year.

These benefits are not limited to personal driving. The same consequences—and the same questions—are also applicable in the commercial trucking industry.

Connected vehicle technologies, such as lane-keeping systems, automatic braking, and adaptive cruise control, are already making their way onto trucks. As these features start to become less expensive and, therefore, more common, current regulations will have to be reevaluated. Hours-of-service regulations create confusion, headaches, and delays for ground shipments and for the hard-working men and women

in the trucking industry. Looking forward, why couldn't an "auto-pilot" eventually take over for truckers on interstates, taking some of the stress off the operator? If an autonomous car could drive someone in their personal vehicle, why couldn't our trucking industry have a similar advantage, thus improving efficiency and allowing hours-of-service rules to be modified?

As with any new technology, extensive testing, certification, and training would be needed to truly offer a safety advantage, but these possibilities are certainly not out of reach.

These exciting potential developments for safer roads bring us to the next question many ask of lawmakers: What role should government have in regulating or promoting new technology or autonomous vehicles?

New technologies are already on their way—America has always been a cradle of innovation and competition. Congress has a responsibility to follow these

technological developments and anticipate future issues. But at the same time, private companies, universities, and individuals need to be able to flourish, invent, and advance without overly-burdensome government regulations holding them back.

Safety is always paramount, and I remain excited about the possibilities that lie ahead to make our roads safer through advanced vehicle technology.

*U.S. Representative Tom Petri represents Wisconsin's Sixth Congressional District in Congress*



2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

## Ethanol Mandate Takes a Toll on Engines



**By Rep. Robert Goodlatte (R-VA)**  
Representing Virginia's 6th Congressional District

Many of us depend on our cars, trucks, and SUVs to get us from point A to point B each day. That means regular trips to the gas station to fill up. However, what you may not know is that the volume of ethanol in your gasoline may very well affect the way your vehicle functions. And

it is also a topic of great debate before Congress right now.

The Renewable Fuel Standard, or RFS, mandates that 36 billion gallons of renewable fuels be part of our nation's fuel supply by 2022. This mandate is almost entirely fulfilled by corn ethanol. Currently, the Environmental Protection Agency (EPA) requires that the nation's fuel supply contain 18.15 billion gallons of renewable fuels in 2014, of which approximately 14.4 billion gallons will be made up by corn ethanol.

But what impact does the RFS have on you or your vehicle? A combination of rising ethanol mandates and declining gasoline demand has exacerbated the onset of the E10 blend wall, or the point at which the gasoline supply is saturated with the maximum amount of ethanol that current vehicles, engines, and infrastructure can safely accommodate. There are serious concerns that blending more ethanol into the fuel supply through E15,

gasoline that is 15 percent ethanol, will have a detrimental impact on our economy, the environment, the cost of our food, and many cars on the road today.

A majority of vehicles are only approved to use E10, gasoline containing 10 percent ethanol. According to AAA, more than 90 percent of vehicles on the road today are not approved by manufacturers to use E15 fuel. For cars that are not compatible with E15, accidentally using this fuel with a higher volume of ethanol can potentially damage your engine and void your vehicle's manufacturer warranty. It's not just automobile engines that are damaged by ethanol in fuel. Boat motors and small engines, like chainsaws and lawn mowers, are also subject to damage from higher ethanol blends.

Additionally, motorists are getting less at the pump as a result of the ethanol mandate. Per gallon, ethanol contains 33 percent less energy than gasoline.

Mixing greater amounts of ethanol with gasoline decreases the efficiency of the fuel and sends motorists to the gas station more frequently.

The RFS is clearly broken. A policy that started with good intentions has resulted in unintended consequences. Members of Congress have heard these concerns. In October, I led a letter signed by 169 bipartisan Members of the House of Representatives to the EPA asking them to lower the ethanol mandate for 2014. Acknowledging that the mandate is unworkable, the EPA has proposed a slight reduction in 2014 levels. However, it is not enough to mitigate the impacts of the RFS on our economy and provide the needed relief.

Any band-aid relief that EPA may provide does not fix this broken policy. Congress must step in to end the ethanol mandate. That is why I introduced H.R. 1461, the Renewable Fuel Standard Elimination Act. This

legislation will completely eliminate the mandate that is forcing more ethanol to be blended into the fuel supply and distorting the market. More than 70 bipartisan members of the House have signed on as cosponsors. The mounting support surrounding the RFS Elimination Act from legislators and industry groups is evidence that there is growing momentum to move a permanent legislative fix and repeal the RFS. I have also introduced H.R. 1462, the RFS Reform Act, which would reform the way the RFS works and cap the amount of ethanol that can be blended into gasoline at 10 percent.

Renewable fuels have a place in America's energy policy. However, these fuels should compete fairly in the marketplace, free from the distortion and government interference that the current ethanol mandate forces. These policies should not be enacted in a way where the implications for consumers and the current

vehicle fleet are simply ignored. It is critical that Congress act now to ease the effects of the ethanol mandate that is taking a toll on engines and our economy.

*Robert Goodlatte represents the Sixth Congressional District of Virginia and Chairman of the House Judiciary Committee. Goodlatte is the sponsor of H.R. 1461, the RFS Elimination Act, and H.R. 1462, the RFS Reform Act.*



# VIEW FROM CAPITOL HILL



## New Innovations Will Drive American Auto Manufacturing



**By Rep. Lee Terry (R-NE)**  
Representing the 2nd District of Nebraska

hard working Americans who can make our economy thrive. From what we're seeing, our nation of builders is leading the renaissance in American manufacturing.

And leading that charge are our nation's automobile manufacturers. Almost eight million of these hard-working men and women in all 50 states are illustrating the best America has to offer. They're driving economic output in the forms of new jobs and increased tax revenues for federal, state and local governments. They're also leading with new technology and innovation that makes American made cars, smarter, more energy efficient and safer.

Last year, the House Energy and Commerce Committee's Subcommittee on Commerce Manufacturing and Trade held a hearing on auto manufacturing where we focused on how these middle class jobs drive our economy.

Throughout the "great recession" in 2007-2008, we saw vehicle production drop fifty percent in two years. In 2009, however, automobile

manufacturing began bouncing back, producing 8.7 million vehicles and recouping 100,000 jobs. It's great progress but there is much more work to do.

Across manufacturing, this Congress's top priorities should be attracting foreign investment to build manufacturing facilities in the U.S.; lowering barriers to allow automobile companies to expand, and equipping workers with the skills necessary to earn jobs in the 21st century manufacturing industry.

When we increase auto manufacturing, we not only increase direct employment, but we also take advantage of the auto industry's tremendous employment multiplier - nearly eight million domestic jobs are created by the 800,000 employees who build our cars, trucks and minivans.

Increased domestic manufacturing means a net gain for our economy. Right now, we must have policies that encourage a higher level of foreign direct investment and expand our export base so that domestic manufacturers can fully take advantage of the opportunities present in

the pending trade agreements - the Trans-Pacific Partnership (TPP) and the Transatlantic Trade and Investment Partnership (TTIP).

But Freidman was right. We're not going to grow our manufacturing base in government bureaus. Rather, it's the ingenuity of our auto manufacturers that are putting models on the showroom floor that are better, more affordable, more efficient and safer. And that ingenuity is selling cars.

Over the years, a lot of attention has been paid to the crashworthiness of automobiles. Much has been invested in time, money and efforts getting people to wear seatbelts and eventually a 3-point harness. Then automakers introduced airbags and later side airbags. Traffic safety fatalities are now near a 60-year low. We should be pleased with dramatic advances that have been made over the past decade, but we need to keep striving for more innovations that keep drivers and their passengers safe.

Today's safety features include vehicles equipped with

systems that warn drivers when there are problems and when they're drifting out of their lane. Some of these systems even go so far as to begin slowing down a vehicle when danger is present before the driver has a chance to react.

It's not too far in the distant future when computers will significantly aid drivers by helping them keep their vehicle spaced evenly from others. Computers will help the driver with vehicles sensing their relative position and communicating with each other constantly.

The challenge to me it seems, is how to keep making progress in these areas without stifling innovation. That leads me right back to where I started - American manufacturing.

The Commerce, Manufacturing and Trade Subcommittee held a series of hearings titled "Our Nation of Builders" in which we learned from manufacturers across all industries, that there is a tremendous skills gap. Over 40 witnesses testified, including some from the automotive industry, where they repeatedly stated that they have

jobs but can't find skilled workers to hire for their factories.

New innovations and a skilled workforce who can help make advanced manufacturing a reality. These new innovations and new skills are needed to keep America competitive and keep up with the growing demands of the 21st Century.

I'm confident we can meet this challenge and that the auto industry will continue to lead the resurgence of American manufacturing.

Rep. Lee Terry (R-NE) is a senior member of the House Energy and Commerce Committee and chairs the Subcommittee on Commerce, Manufacturing and Trade.



2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

## Our New Cars Require an Improved Infrastructure



**By Rep. Mike Honda (D-CA)**  
Representing California's 17th Congressional District

of last year, there were almost a half-million hybrids on the road. Sales of plug-in electric cars shot up 83% between 2012 and 2013. The American people are sending a clear message with their wallets - they want to protect the environment while simultaneously reducing our dependence on foreign oil. As a proud Prius owner for more than 10 years, I welcome this change wholeheartedly.

But if we are going to move our vehicles into the future, we have to make some substantial changes to our electric infrastructure. Along with increasing the number of charging stations available to those who drive electric cars, we need to substantially improve our electric grid to meet this future demand. Currently, there are only

6,925 public charging stations to serve the entire U.S., with 22% of them in California. We need to promote the building of charging stations in new areas of development, and provide financial incentives to those who choose to install charging stations in their homes. This is why I co-signed a letter to the House Ways and Means Committee to extend the Alternative Fuel Vehicle Refueling Credit, which allows for private investment in charging stations and other alternative infrastructure. This bill will create jobs, and allow for the country to decrease its reliance on fossil fuels and imported oil.

Of course, more charging stations means we will have to significantly upgrade our aging electrical grid. Outages and

interruptions to the electric supply cost the U.S. over \$150 billion each year. Moving to smart grid technology, with increased automation and energy storage options, will ensure that we are using electricity as efficiently as possible.

Energy storage technologies will play an important role in emergency preparedness as well. As we have seen, our current energy grid often cannot provide electricity during a disaster, hampering rescue and recovery efforts. The energy storage technologies pioneered in electric vehicles will be integral to advancing the options that are available for use on the grid. Energy storage for the smart grid is key to optimizing the use of renewable energy technologies. Wind and solar

energy must be stored to become a viable solution to the energy challenges we are facing. The energy storage business has the potential to grow from a \$200 million business in 2012, to a \$19 billion industry by 2017.

As the Representative in Congress for Silicon Valley, I know what technology and innovation can do. This is why I have cosponsored two important bills; one that would end federal tax cuts to the fossil fuel industry (End Polluter Welfare Act 2013) and another that would provide grants for students who develop, operate, and maintain clean energy infrastructure (GREEN Act).

Investing in our infrastructure is not a choice. It is a necessity. It's also one of the most effective steps we can take

to support growing, American-based technologies. The American people have spoken - more and more they want cars that run on electricity. It's up to us, as lawmakers and public servants, to give them the means to do so.

Congressman Mike Honda (D-CA) represents the 17th District of California, including Silicon Valley



2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

## Automobiles and American Exceptionalism



**By Rep. Todd Rokita (R-IN)**  
Representing Indiana's 4th Congressional District

your parents let you take the car out on a date? The feelings and memories are impossible to replicate. It is certainly Americana. It is also, I argue, a product of our Exceptionalism.

The American love affair with the automobile is rooted, not only in the necessity to traverse a vast and wide open country, but it is also a by-product of our unique individual liberty. The automobile is a symbol of our freedom - the freedom to go where we want and the freedom to choose how we get there.

The automobile revolutionized transportation and whole societies, especially our own. Advances like those found in the automobile can only be accomplished in an atmosphere of innovation, specifically, the kinds of environs that American Exceptionalism provides. From the engine, to suspension, to gadgets on the dashboard, the automobile is constantly undergoing reinvention.

And because of the innovation-producing environment

that has defined the majority of the American landscape throughout history, driving today is certainly an activity that is full of choices. Whether you're in a 1973 Corvette Stingray like mine, a pickup truck, or a mini-van, the choice was yours. Some of us made a practical lifestyle choice such as price or size, while others may decide first on color, accessories, or what's under the hood.

One consideration that all Americans make when choosing a vehicle is safety.

Today's free market continues to demand, inspire, and deliver new technology to make us safer. Over the decades, active safety technologies as simple as seat belts, or as complex as brakes and suspension systems, have been created to save lives and reduce injuries. Many of these technologies, I might add, are created and designed by engineering students who graduated from great institutions like Purdue University and who now work for companies like Delphi in Indiana.

In order for free enterprise to work, consumers must have the transparency required to fully understand the safety of the vehicle they purchase. To that end, automobile manufacturers and the federal government created reporting guidelines to provide consumers with a number of important facts about a vehicle. The key piece of information that is reported to consumers is a vehicle's crashworthiness.

In not so free market fashion, however, the National Highway Traffic Safety Administration (NHTSA) requires a five-star crashworthiness rating on the window sticker of a new vehicle. Crashworthiness is a rating that reports how well a vehicle will protect occupants in the event of an accident. A five-star rated vehicle, the highest rating, has been determined to have a 10 percent or less chance of injury in a frontal crash, and a 5 percent or less chance of serious injury in a side crash.

While I believe that informing the car buyer about the crashworthiness of a vehicle is a superior

approach to mandating that a certain rating be achieved, my point here is that active safety technologies, like new technologies including brake assist, collision avoidance systems, or the many sensor-based systems being installed and created today, are dramatically improving the safe operation of our automobiles. Logic dictates that these tools would improve a vehicle's crashworthiness rating, yet they currently do not.

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) was signed into law. MAP-21 expanded NHTSA's consumer information responsibilities to include active safety technology. Since the passage of MAP-21, NHTSA has failed to make it a priority to include this information in the safety rating scale that consumers know to look for on the window sticker - crashworthiness.

Consumers need knowledge and transparency to fully understand how these technologies impact their safety. When making the choice in a vehicle

purchase, all of the latest technologies that impact the crashworthiness should be a part of that rating. That is why I will introduce the Safety Through Informed Consumers Act (STICRS) in the weeks ahead.

STICRS requires NHTSA to integrate these technologies into the crashworthiness rating. Americans are the best consumers in the world when they have access to accurate information. This law helps shine a light on the innovative technologies that are out there without mandating what Americans must purchase. It encourages innovation but preserves freedom of choice in the market. Enjoy the Auto Show!



2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

# OPTIONS. WITHOUT THEM, WE'RE ALL BEHIND THE EIGHT BALL.

Petroleum fuels almost all of our transportation. Its price – which impacts the cost of all transported products – is set globally, not by U.S. supply and demand but by the politics of the world's most unstable regions. No matter how much oil we drill, relying on a single source of transportation fuel makes our economy unstable. America's Advanced Biofuel, Biodiesel is here, now – growing and diversifying our transportation energy supply.



[AmericasAdvancedBiofuel.org](http://AmericasAdvancedBiofuel.org)

## Take your cue from Biodiesel.

# VIEW FROM CAPITOL HILL



## When it Comes to Innovation, Michigan is Leading Again



**By Rep. Kerry Bentivolio (R-MI)**  
Representing Michigan's 11th Congressional District

Innovation in transportation and the use of our nation's extraordinary natural resources has played a vital role in making the United States the wealthiest nation in history. The two have always gone hand in hand in order to create more prosperity for future generations.

Our country is currently going through another energy revolution. Due to fracking, domestic production of natural gas has exploded over the last few years. The United States is now one of the leading producers of natural gas in the world. The boon has helped lower our trade deficit drastically.

Cheaper and cleaner than oil,

natural gas serves as a potential driver for a transportation revolution. In the 19th Century, Americans used trains to connect the Atlantic to the Pacific. In the 20th Century, America's auto industry put the nation on wheels and served as the Arsenal of Democracy. Today, American manufacturers are advancing innovative technologies to reduce the cost of travel.

Michigan is again leading the transportation industry into the 21st Century. For example, Specialized Vehicles, Inc. in Troy, Michigan is developing natural gas retrofit packages for existing Class 8 trucks that will dramatically reduce engine emissions

and promote significant natural resource conservation.

In a discussion with Michael Koran, the founder of SVI, he explained how his work shows that Americans can create new technology, in the free market, that can reduce pollution and lower costs. Some of the facts and numbers of his program that he gave were astounding:

- Natural gas costs about \$1.90 per Diesel Equivalent Gallon (DEG). The current Diesel fuel costs roughly \$4.00/gal.
- Quieter engine operation that reduces noise pollution.
- Natural Gas is a cleaner burning fuel, no particulates enter our atmosphere.

- Zero Non-Methane Hydrocarbon Organic Gases (NMHC, or NMOG) emissions
- 25 to 50% lower CO2 greenhouse gas emissions

All materials used in program concept design have initial immediate path to recycling, reducing landfill usage.

Koran's efforts, which all take place in Michigan, show how the United States can recover some of its lost manufacturing. Using America's abundant natural resources will mean cheaper transportation costs and a higher standard of living for our country. It means more money to be invested into American

companies. And, it means more high-paying jobs for Americans workers. That's something everyone in Washington should support and promote.



2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

2014 AUTO PREVIEW: POLICY AND BUYERS GUIDE

## Renewable Fuels Policy Isn't Just About Ethanol



**By Joe Jobe**  
CEO of the National Biodiesel Board

waste," Obama explained to the media during his visit.

After the election, Obama followed up by calling for more investment in advanced biofuels in his 2009 State of the Union Address. And his Administration stood firmly behind the Renewable Fuel Standard (RFS), the nation's alternative transportation fuels policy developed under George W. Bush's Administration. As producers of the country's first nationally commercialized advanced biofuel, the biodiesel industry applauded his support.

But those early proclamations seem an eternity ago after the Administration last week cut biodiesel and advanced biofuels production under the RFS. Now, with the country at a crossroads in its fuels policy, the industry needs President Obama's leadership more than ever.

Since the President's early support for advanced biofuels, and in part as a result, the

biodiesel industry has flourished. Biodiesel has the highest energy balance, carbon balance, and energy content of any domestic commercially available fuel. It is made from a diverse mix of regionally abundant and renewable co-products and waste products such as soybean oil, animal fats and recycled cooking oils. It is less toxic than table salt and biodegrades as fast as sugar.

Biodiesel production is on track to set a production record exceeding 1.7 billion gallons this year, setting new monthly production records virtually every month since April. In fact, the industry has recently been producing 170 million gallons of biodiesel per month - an annualized rate of 2 billion gallons. Biodiesel has made the advanced biofuels category of the RFS a tremendous success story, realizing all of the promises of advanced biofuels with none of the speculated downsides.

But rather than build on that success, the Administration's proposal would be a staggering retreat. It would set biodiesel at 1.28 billion gallons while shrinking the overall Advanced requirement to 2.2 billion gallons -- effectively killing the growth and progress of recent years. Further, because excess production in 2013 can be used for RFS compliance in 2014, the 1.28 billion gallon proposal could mean an effective market closer to 1 billion gallons - cutting the industry in half from current production rates.

While we recognize the oil and gas industry has so far this year spent more than \$100 million dollars lobbying Congress and the Administration, it is unclear why the EPA has proposed such a retreat, just as the advanced program was beginning to demonstrate robust success. (Biodiesel, because it is blended in the diesel pool, doesn't contribute to the

ethanol "blendwall" concerns that the Administration says it is trying to address with its RFS proposal).

But what we do know is the consequences would be measured nationwide in plant closings and layoffs. That's why 32 senators from both parties penned a letter to the President last week respectfully requesting the Administration rethink the EPA's misguided proposal. As the letter explains, the proposal could result in plant closures and thousands of lost jobs, while effectively shutting down investment.

Now is not the time to waver on America's advanced biofuels. The RFS is nurturing biodiesel's

young and fragile industry as intended and we're making incremental progress in diversifying the transportation fuels market. It's only through diversification that we can cut into high fuel prices and achieve real energy security.

We remain hopeful the President will weigh in and remind the EPA of his commitment to biodiesel's important role in creating good jobs that are helping diversify the transportation fuels marketplace. But time is short.

-30-

Jobe is CEO of the National Biodiesel Board, the U.S. trade association of America's biodiesel industry.



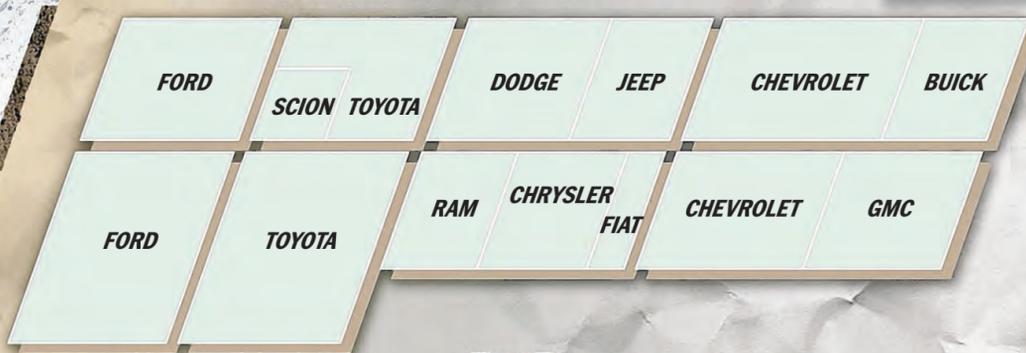
## State of the Union

Advocacy Opportunities  
January 28 & January 29, 2014

For more information  
Contact Peter Vandevanter  
202-636-3027.

The Washington Times

# 72ND ANNUAL WASHINGTON AUTO SHOW



Level Two, Exhibit Halls D & E

SECOND LEVEL ENTRANCE

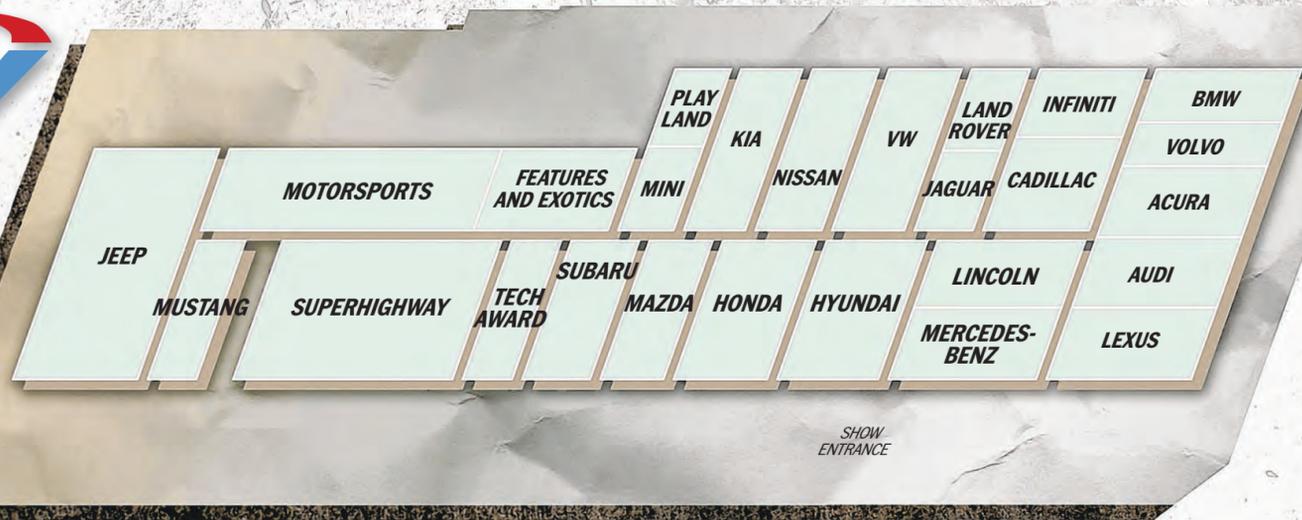
January 23 - February 2, 2014

Thu. Jan. 23, 2014	12:00 pm - 9:00 pm
Fri. Jan. 24, 2014	12:00 pm - 10:00 pm
Sat. Jan. 25, 2014	10:00 am - 10:00 pm
Sun. Jan. 26, 2014	10:00 am - 7:00 pm
Mon. Jan. 27, 2014	12:00 pm - 9:00 pm
Tue. Jan. 28, 2014	12:00 pm - 9:00 pm
Wed. Jan. 29, 2014	12:00 pm - 9:00 pm
Thur. Jan. 30, 2014	12:00 pm - 9:00 pm
Fri. Jan. 31, 2014	12:00 pm - 10:00 pm
Sat. Feb. 1, 2014	10:00 am - 10:00 pm
Sun. Feb. 2, 2014	10:00 am - 6:00 pm

7th Street



N Street



Lower Level, Exhibit Halls A, B & C

SHOW ENTRANCE

9th Street

GREG GROESCH/THE WASHINGTON TIMES

## 2014 ACURA MDX

The all-new 2014 MDX harnesses a host of Acura signature technologies to offer higher levels of luxury, quietness, comfort and prestige in a vehicle that performs at the will of the driver with intuitive control and exhilarating dynamic performance.

The 2014 MDX is based on an all-new, purpose-built platform. Where previous generations of the MDX were developed from an existing Global Light Truck Platform, the 2014 MDX was completely redesigned and developed from the ground up.

This approach to body development included the strategic use of lightweight materials -- such as 64-percent high-strength steel, aluminum and magnesium -- resulting in a 275-pound reduction in overall vehicle weight compared to the previous model, aiding both fuel efficiency and dynamic performance.

An all-new 3.5-liter V-6 engine, rated at 290 horsepower and 267 lb.-ft. torque powers the MDX.

The MDX body sides are defined by a tall and dramatic beltline, windswept roofline, decisive upper and lower character lines, stylized chrome door handles integrated into the upper character line, dynamic fender arches, and chrome window surrounds.

A new One-Touch Walk-In feature for the second-row seats, along with a 4.5-inch wider foot entry point and 1.8-inch lower step-in height, makes third-row ingress and egress easier. A new Extended Slide feature for the second-row seats provides 5.9 inches of total fore-aft seat travel, allowing for more flexibility in accommodating the needs of both second- and third-row passengers.

High-end elements such as soft-touch materials, premium finishes, simulated wood-grain accents and satin chrome plated trim combine with an intuitive

new control layout to create an upscale and user-friendly environment.

**Base model estimated mpg:** 20/28  
**Estimated starting price:** \$42,290

## 2014 ACURA TSX

With engaging, athletic handling, the 2014 Acura TSX Sedan and Sport Wagon have a well-established sporting streak. And with comfortable space for five passengers, coupled with compact exterior dimensions, the 2014 TSX also hits the sweet spot for drivers with an enthusiast's mindset.

The TSX model lineup starts with the 201-horsepower 4-cylinder TSX Sedan includes a Sequential SportShift 5-speed automatic transmission. An available Technology Package adds a range of desirable features.

The TSX Special Edition Sedan is available with either a 6-speed manual transmission or a Sequential SportShift 5-speed automatic transmission, and adds an ebony interior with red stitching, red instrument illumination and other upgrades. The TSX V-6 with Technology Package tops the sedan lineup.

The TSX fully looks the part of a sport sedan, with bold lines and a wide, powerful stance. Inside, the TSX blends sport sedan style with inviting comfort, with standard leather seating highlighted by handsome contrasting-color stitching.

For those who are considering the purchase of a compact SUV -- but who value the higher fuel efficiency and dynamic performance of a sports sedan, the TSX Sport Wagon offers a generous 66.2 cubic feet of rear cargo area (with rear seats folded down; 31.5 cu. ft. with the seats up), allowing the Sport Wagon to accommodate bulky items such as large boxes, furniture, bicycles, four full-size golf bags or surfboards.

Acura is known for its powerful, intuitive technology, and the 2014 TSX delivers on this concept. The TSX with the available Technology Package includes an LED backlit full VGA navigation screen, rearview camera, Song By Voice (SBV) user interface, and the ability to download

15-gigabytes of personal music (more than 3,500 songs) to the TSX's hard disk drive.

**Base model estimated mpg:** 22/31  
**Estimated starting price:** \$30,635

## 2014 AUDI A6

The Audi A6 model line, representing class-leading technology, performance and precision, is enhanced for 2014 with the addition of the Audi A6 TDI clean diesel model.

New for 2014, the Audi A6 TDI's 3.0-liter 6-cylinder clean diesel engine with 8-speed Tiptronic transmission and all-wheel drive generates a powerful 240 hp and 428 lb-ft torque, seamlessly launching from 0-60 mph in 5.5 seconds.

The highly-efficient A6 2.0T with inline four-cylinder engine continues to be offered in two variants to suit individual tastes: the Audi multitronic continuously variable transmission with front-wheel drive offers excellent fuel efficiency and a spirited drive, or the eight-speed Tiptronic automatic transmission with Audi quattro AWD, offering superior traction and handling. New for 2014, A6 2.0T models deliver an increased horsepower of 220.

The 2014 Audi 3.0T is powered by the 3.0-liter TFSI direct-injection V6 supercharged engine that delivers an incredible 310 hp and 325 lb-ft of torque. Mated to the eight-speed Tiptronic transmission, the A6 accelerates from 0-60 mph in 5.3 seconds.

The Audi A6 features sharp lines, short overhangs, and distinctive and functional design elements -- like the optional LED headlights and standard LED taillights -- giving the A6 an undeniable presence on the road.

Inside, the Audi A6 features luxurious materials, functional amenities, and sophisticated design elements. New for the 2014 Model Year, heated front seats are now standard in the A6 2.0T entry model.

With the wraparound curve of the dashboard, fine leather, 12-way power front comfort seats with four-way power lumbar adjustment, automatic three-zone climate control system, and



2014 Audi SQ5

optional Bang and Olufsen Advanced Sound System, the A6 provides the ultimate driving experience.

**Base model estimated mpg:** 20/29  
**Estimated starting price:** \$43,100

## 2014 AUDI SQ5

The Audi Q5, which combines the handling of a sport sedan, the higher ground clearance of an SUV, and the cabin of a luxury car, receives several enhancements for 2014.

Brand new to the Q5 line is the high-performance 2014 Audi SQ5, the first-ever S variant of any

Audi Q model. The supercharged 3.0-liter TFSI direct-injection V-6 engine achieves 354 horsepower and 347 lb.-ft. of torque. Propelling from 0-60 mph in 5.1 seconds, the SQ5 reaches a top track speed of 155 mph.

The SQ5 bears all the signature elements of Audi S models, including the Audi Singleframe grille in Platinum Gray with horizontal twin blades in alu-optic; Aluminum optic exterior mirror housing; and S model specific brakes, side sills, roof spoiler and quad exhaust pipes with finished tips. The SQ5 has standard

20-inch wheels and is also available with 21-inch wheels.

The 2014 Audi SQ5 has a distinctive and sporty interior, with a three-spoke multifunction flat-bottom steering wheel with alu-optic shift paddles and contrast stitching, Gray instrument face with white needles, pedals with aluminum inserts, and SQ5 specific leather/aluminum shift knob. Leather seating surfaces are standard (Milano leather seats when equipped with comfort seats), and a Fine Nappa interior and comfort package is available. Additionally, Layered Aluminum/Black wood decorative inlays are also available in the SQ5.

Inside, the Audi is filled with luxurious and functional amenities, including comfortable leather seating surfaces, an eye-catching mix of aluminum accents and all-natural walnut trim, and an optional specially designed thermo heated/cooled cupholder.

The rear seats easily can be folded together with the use of a convenient single release feature that increases the cargo capacity from 29.1 to 57.3 cubic feet.

**Base model estimated mpg:** 16/23  
**Estimated starting price:** \$51,900



2014 Audi A6

**2014 BMW i3**

The 2014 BMW i3 is a landmark in BMW's mission to provide a completely sustainable, electric vehicle that still stays true to the Ultimate Driving Machine moniker. The i3 is the first product of the BMW's new "i" sub-brand, and is a new era for electro-mobility at BMW.

It is the first-ever mass-produced Carbon Fiber Reinforced Plastic (CFRP) passenger cell in the automotive business, and is a big factor in the car's efficiency. Carbon Fiber Reinforced Plastic is equally as strong as steel, while being 50 percent lighter.



2014 BMW i3

The interior is made using high quality renewable sources and recycled materials. The BMW i3 has the Next Premium interior, which blends sustainable resources with a premium feel for the same interior quality as the BMW 5 Series Sedan.

The BMW i3 will be able to travel 80 to 100 miles on a single charge. This can be increased by up to approximately 12 percent in ECO PRO mode. It is able to recharge in only 3 hours with the use of a 220V Level 2 charger.

In order to reduce range anxiety, a rear-mounted 650cc, 34-hp, two-cylinder, gasoline-powered Range Extender generator is available, which roughly doubles the i3's range. When the battery gets to a certain level, the Range Extender starts and maintains the battery's current state of charge. The Range Extender has a fuel capacity of 2.4 gallons.

The BMW i3's small size allows it to easily maneuver and park on city streets. Its sharp turning radius and nimble handling are the perfect match for city driving.

In the front, the Slide Through Experience allows the driver to slide through the car and exit on the passenger side, to avoid exiting into a busy city street. This is made possible because of the absence of the transmission tunnel. The coach doors make getting into and out of the car much more practical by eliminating the B pillar and creating one large opening to enter and exit.

**Base model estimated mpg:** TBD  
**Estimated starting price:** \$41,350

**2014 BMW M6 GRAN COUPE**

The 2014 BMW M6 Gran Coupe is an ultra-high performance, four-door Coupe design with stunning aesthetics, race-bred technology, and the signature driving character of BMW M GmbH.

The M6 Gran Coupe is made instantly unique among four-door vehicles by its bonded-in carbon fiber composite roof panel, similar to the one found on the M6 Coupe. Between the doors is a cabin of sensational coupe-like design and first-class materials. The four-plus-one seating arrangement allows the M6 Gran Coupe to carry four adults in luxury, and offers maximum seating capacity for five when needed.

The new M6 Gran Coupe features the most powerful engine ever fitted to an M production car, a 4.4-liter M TwinPower Turbo V-8 with 560 horsepower and an always-accessible 500 lb.-ft. of torque. With this endowment, the rear-wheel drive BMW M6 Gran Coupe practically rockets from 0-60 mph in 4.1 seconds and reaches an electronically-limited top speed of 155 mph in only a few seconds more.



The new BMW M6 Gran Coupe focuses the gargantuan muscle of its engine on the road through one of the most advanced drivetrains BMW has ever developed. The high-torque 7-speed M-Double Clutch Transmission (M-DCT) sends power uninterrupted to the innovative Active M Differential, which in turn perfectly balances power between the rear wheels.

The car is dominated by its large air intakes, optional Adaptive LED Headlights and an M kidney grille designed especially for this model.

Prominently flared wheel arches draw the eye to a track width specific to the BMW M6 Gran Coupe. Twenty-inch M light-alloy wheels underline the car's distinctive appearance.

The interior of the new BMW



2014 BMW M6 Gran Coupe

M6 Gran Coupe brings together the incomparable combination of the driver-oriented cockpit design of a sports car with the spaciousness and luxurious feel of a premium automobile.

**Base model estimated mpg:** 14/21  
**Estimated starting price:** \$133,000

**2014 BUICK ENCORE**

The Buick Encore returns for 2014 with new safety features that complement the luxury amenities, refinement and signature Buick style for this unique crossover. The new features include Rear Cross Traffic Alert and Side Blind Zone Alert.

Encore is maneuverable, versatile and efficient, offering a uniquely sized package that's unmatched in the luxury segment. With room for five and up to 48.4 cubic feet of storage space when the rear seats are folded, it delivers substantial cargo capacity along with a confident, higher driving position and available all-wheel drive. Buick's exclusive QuietTuning is standard and includes active noise cancellation technology.

Additional standard features include 10 airbags, StabiliTrak stability enhancement and a 138-horsepower Ecotec 1.4L turbo four-cylinder/six-speed automatic powertrain, along with technologies such as Buick's voice-activated IntelliLink. It uses Bluetooth or a USB to connect the driver's smartphone to a 7-inch, high-resolution, full-color display radio.

The 2014 Encore is offered in front-wheel and available all-wheel-drive configurations in four trim levels: Encore (ISB), Encore Convenience (ISD), Encore Leather (ISL) and Encore Premium (ISN).

Encore's sculpted styling identifies it as a contemporary Buick. Signature cues include a waterfall grille, chrome accents and surrounds, portholes on the hood and painted lower panels. Standard body-color door handles with chrome strips and a styled, stainless steel exhaust tip add to the premium look.

Blue-accented halogen composite projector-beam headlamps and detailed taillamps further enhance the Encore exterior; and 18-inch, five-spoke painted aluminum wheels are standard. Seven-spoke chromed aluminum wheels are available.

**Base model estimated mpg:** 25/33  
**Estimated starting price:** \$24,500

**2014 CADILLAC ESCALADE**

Cadillac Escalade exemplifies luxury and performance with technology, power and style. This luxury SUV maintains its reputation with the 2014 lineup, offering two distinct body styles and Platinum models aimed at the most discerning customers.

Escalade ESV is the most spacious of the Escalade family. It is 21 inches longer than Escalade and offers up to 137.4 cubic feet of cargo space behind the first

row, with the second folded and third row removed.

Escalade Platinum -- offered on both Escalade and Escalade ESV -- is the highest expression of the brand's design, luxury and technology, with features including LED headlamps and

row, with the second folded and third row removed.

Escalade Platinum -- offered on both Escalade and Escalade ESV -- is the highest expression of the brand's design, luxury and technology, with features including LED headlamps and



2014 Chevrolet Camaro

Magnetic Ride Control, unique 22-inch, multi-spoke wheels and exclusive Platinum exterior badges.

A roomy interior sets the stage for Escalade and Escalade ESV models to seat up to eight passengers, with generous cargo room available when the third-row seat is removed. A unique instrument panel includes gauges with white needles and blue light inlays with continuously lit, white-LED backlighting. Leather seating surfaces are standard.

Escalade and Escalade ESV offer a power fold-and-tumble second-row seat feature for easy access to the third-row seat, and a power-assisted rear liftgate that opens and closes with the touch of a button.

Performance remains at the forefront for the 2014 Escalade, as all models are equipped with a 6.2L V-8 rated at 403 horsepower and 417 lb.-ft. of torque. The powertrain features variable valve timing, Active Fuel Management technology and E85 capability. The fuel-saving Hydra-Matic 6L80 six-speed automatic transmission is paired with the 6.2L engine in all models and an intelligent all-wheel-drive (AWD) system is available.

The Escalade and Escalade ESV, available in AWD and RWD configurations.  
**Base model estimated mpg:** 14/18  
**Estimated starting price:** \$63,745

**2014 CHEVROLET CAMARO**

The 2014 Camaro models feature a revised exterior design that integrates high-performance aerodynamics for more efficient cooling and stability at high speeds. The 2014 Chevy Camaro represents the most significant redesign since the introduction of the fifth-generation Camaro as a concept car in 2006.

Compared to the previous model, the design represents a strong visual change front and rear, resulting in a wider, lower, more contemporary appearance. The front fascia features a wider lower opening, and a narrower upper opening that also updates the appearance of the iconic "halo ring" HID headlamps on the Camaro RS package.

The functional hood vent on the Camaro SS helps reduce heat and aerodynamic lift. Moving to the rear, the sculptural decklid, horizontal lamps and diffuser complete the powerful statement.

The new 2014 Camaro Z/28 features a full aerodynamics package that creates downforce at speed, which helps make it the most track-capable offering in Camaro's history.

On the interior, the Camaro Z/28 features trim in a distinctive, matte-metallic finish named Octane, the ZL1 flat-bottomed steering wheel, and standard Recaro seats with microfiber suede inserts.

The new seats (also available on the coupe versions of the SS and ZL1 models), feature aggressive bolsters for high-performance driving, as well as seat cutouts inspired by the five-point harnesses found on racing seats. To save weight, both front seats incorporate manual adjustment.

The most-powerful engine offered is the Camaro ZL1's supercharged 6.2L LSA, which delivers 580 horsepower. The heart of the 2014 Camaro Z/28 is the lighter, naturally aspirated 7.0L LS7 first introduced in the Corvette Z06.  
**Base model estimated mpg:** 17/28  
**Estimated starting price:** \$23,455

**2014 CHEVROLET CORVETTE**

Chevrolet redefines modern performance with the all-new 2014 Corvette Stingray. And only a Corvette with the perfect balance of technology, design and performance can wear the iconic Stingray designation.

The 2014 Corvette Stingray

is the most powerful standard model ever, with an estimated 450 horsepower and 450 lb.-ft. of torque. It is also the most capable standard model ever, able to accelerate from 0-60 in less than 4 seconds and achieve more than 1g in cornering grip. It is expected to be the most fuel-efficient Corvette, exceeding the EPA-estimated 26 mpg of the current model.

The 2014 Corvette Stingray shares only two parts with the previous generation Corvette. It incorporates an all-new frame structure and chassis, a new powertrain and supporting technologies, as well as completely new exterior and interior designs.

The interior includes real carbon fiber, aluminum and hand-wrapped leather materials, two new seat choices -- each featuring



2014 Chevrolet Corvette

a lightweight magnesium frame for exceptional support -- and dual 8-inch configurable driver/infotainment screens.

Advanced driver technologies include a five-position Drive Mode Selector that tailors 12 vehicle attributes to the fit the driver's environment and a new seven-speed manual transmission with Active Rev Matching that anticipates gear selections and matches engine speed for perfect shifts every time.

The all-new 6.2L LT1 V-8 engine combines advanced technologies, including direct injection, Active Fuel Management, continuously variable valve timing and an advanced combustion system that delivers more power while using less fuel.

Track-capable Z51 Performance Package features an electronic limited-slip differential, dry-sump oiling system, integral brake differential and transmission cooling, as well as a unique aero package that further improves high-speed stability.  
**Base model estimated mpg:** 17/29  
**Estimated starting price:** \$51,995

**2014 CHEVROLET SPARK**

The 2014 Chevrolet Spark mini-car is a stylish and practical choice for urbanites who want a car that's easy to drive and own.

Packed with infotainment and safety technologies including 10 standard airbags, Spark is resonating with buyers in large, high-traffic cities where parking and road space are at a premium.

For 2014, Chevrolet adds an all-electric version of the Spark, as well as an available Continuously Variable Transmission in the gasoline Spark that improves fuel economy and acceleration, and reduces engine noise at highway speeds.

Spark LT models also enjoy the first full model year of enhanced connectivity including access to Siri Eyes Free voice recognition (for customers with compatible iPhones), BringGo in-dash navigation (app must be purchased separately) and TuneIn global radio. This is made possible by Spark's segment-exclusive MyLink radio, which includes a 7-inch color touch screen radio nearly twice the size of segment competitors. It is capable of displaying smartphone-based music, videos, photos and contacts for hands-free calling.

Spark is the only car in its segment to offer five doors, accommodating four adults comfortably with room for cargo. With the seats folded down, the Spark offers 31.2 cu. ft. of cargo space.

Air conditioning and power windows are standard across the Spark lineup. Color-coordinated interiors feature an instrument panel with a motorcycle-inspired gauge cluster and lower center console, for maximum visibility and storage.

Decorative inserts in the front door and instrument panel add a premium touch, as does the ice blue ambient lighting and faceplates across the door pockets and dash.

Spark is powered by an Ecotec 1.2L four-cylinder engine that delivers 84 horsepower. It is mated to a standard five-speed manual

transmission. For 2014, an available CVT replaces the previous four-speed automatic.

**Base model estimated mpg:** 31/39  
**Estimated starting price:** \$12,170

**2015 CHEVROLET TAHOE**

Chevrolet introduces the all-new 2015 Tahoe full-size SUV. It offers more functionality, greater refinement, new safety features and an increased range of advanced technologies.

The all-new 2015 Chevy Tahoe goes on sale in the first quarter of 2014.

New functionality and technology features on the 2015 Chevy Tahoe include: Fold-flat second- and third-row seats that enhance cargo convenience, including an available power-folding feature; approximately 2 inches greater legroom for second-row passengers, along with easier entry/exit; available 8-inch color touchscreen radio with next-generation MyLink connectivity; up to six USB ports and six power outlets, including a 110-volt three-prong outlet; conversation mirror in the overhead console that provides a panoramic view of the rear seats; and keyless entry and push-button start.

The 2015 Chevy Tahoe is engineered to deliver a quieter, more-controlled ride and improved steering and braking feel. It all starts on a stronger, fully boxed, perimeter frame, which supports payload and trailering capability that body-frame-integral crossovers and SUVs can't match.

The driving experience is further enhanced with 18-inch wheels that are a half-inch wider, reducing tire flex for improved cornering performance. Twenty- and 22-inch wheels are available.

Tahoe's 5.3L V-8 features state-of-the-art technologies, including direct injection, cylinder deactivation, continuously variable valve timing and an advanced combustion system, designed to make the most of power, torque and efficiency across a broad range of operating conditions. The engine is mated to a Hydra-Matic 6L80 six-speed automatic transmission, featuring TapShift control, Tow/Haul mode and Auto Grade Braking.

**Base model estimated mpg:** TBD  
**Estimated starting price:** TBD

# COOL CRAFTS

## Sugarloaf Crafts Festival

**JANUARY 24, 25, 26, 2014**  
Dulles Expo Center  
Chantilly, VA • Rt. 28 at Willard Rd.  
Admission \$8 online, \$10 at the door - good all 3 days  
Children under 12 and parking are FREE  
Fri. & Sat. 10-6, Sun. 10-5

**DISCOUNT TICKETS, show info, exhibitor lists, directions and more at:**

**MEET 250 JURIED ARTISANS IN PERSON**

- Designer Crafts
- Home Furnishings
- Affordable Art
- Specialty Foods
- Family Fun

**SugarloafCrafts.com**  
SUGARLOAF MOUNTAIN WORKS, INC. • 800.210.9900

**2014 FORD EDGE**

The 2014 Ford Edge is a versatile crossover vehicle with an driving experience for the owner. With expanded availability of all-wheel drive, a sport mode for the six-speed SelectShift Automatic transmission, plus SYNC with MyFord Touch voice-activated technology, the Ford Edge offers great versatility.

Standard on the 2014 Edge is the 3.5-liter V6, which produces 285 horsepower and delivers a 19 mpg city and 27 mpg highway. The Edge Sport, with a 3.7-liter V6, increases performance to 305 horsepower with excellent fuel economy of 18 mpg city and 25 mpg highway. Each engine in the Edge lineup is mated to a fuel-saving six-speed automatic transmission.

Buyers can choose from among Ford's 2.0-liter EcoBoost four-cylinder engine rated at up to 30 mpg; a 3.5-liter Ti-VCT V6 with up to 27 mpg; and a 305-horsepower, 3.7-liter Ti-VCT V6 engine. Edge is available in both front-wheel-drive and all-wheel-drive configurations.

Exclusive to Edge with EcoBoost are aerodynamic enhancements and other technologies to help save fuel, including side door rocker moldings and active grille shutters. Active grille shutters help optimize aerodynamics by using vents to control airflow through the grille to the cooling

Much of Focus Electric's steering, handling and braking feel is shared with the agile, sporty, fuel-powered Focus, making the 2014 Focus Electric a dynamic car.

Focus Electric offers a host of standard safety and security features including six airbags and electronic traction control, along with hands-free SYNC telephone connectivity.

The new Focus Electric offers a unique value charging feature to help owners charge their vehicles at the cheapest utility rates, lowering the cost of ownership. The tool is designed to help customers avoid unnecessary expense by providing an optimized charge. In the future, these smart charging habits will help utility companies understand and better manage the demands placed upon the electric grid because of electrified vehicles.

**Base model estimated mpg:** 110/99  
**Estimated starting price:** \$435,200

**2015 FORD MUSTANG**

The all-new 2015 Ford Mustang features a significant amount of innovative technologies providing drivers with enhanced information, control and connectivity when they want it. From Intelligent Access with push-button start to SYNC and MyKey in every Mustang built, plus available Track Apps, MyColor gauges and new Shaker Pro audio system, drivers will be able to customize their time behind the wheel.

On a twisty back road or a weekend track day, the driver can tap the toggle switches on the console to quickly adjust steering effort, engine response, and transmission and electronic stability control settings using the available Selectable Drive Modes



2014 Honda Accord Hybrid

108.9 cubic feet of storage space (with the second-row seat folded and third-row seat removed).

Yukon XL models have exterior dimensions similar to the regular models, but are about 14 inches longer in wheelbase and 20 inches longer in overall length, offering 137.4 cubic feet of maximum cargo space.

In fact, Yukon XL / Yukon XL Denali offer the segment's best cargo capacity behind the first-, second- and third-row seats. Yukon and Yukon XL models feature a 5.3L V-8 with GM's fuel-saving Active Fuel Management technology, while Denali models feature a 6.2L V-8. Responsive steering, a wide track and low center of gravity contribute to a smooth, comfortable and secure driving experience. When it

fuel efficiency and fun-to-drive performance, and at 50 miles per gallon it delivers the highest EPA city fuel-economy rating of any four door sedan.

With the same fundamental body and chassis architecture as the standard Accord, including its highly aerodynamic and lightweight body, sophisticated suspension design and outstanding interior package, the 2014 Accord Hybrid also delivers on the new-generation Accord's promise to excel in all areas.

These areas include not only fuel efficiency and driving performance but also class-leading passenger comfort and ergonomics; top-level safety and driver-assistive systems with features such as Honda's next-generation ACE body structure, available Lane Departure Warning, Forward Collision Warning and LaneWatch (standard); and leading-edge connectivity via the new HondaLink connected car technology.

The Accord Hybrid's two-motor hybrid system seamlessly blends electric-only, hybrid and engine drive modes along with powerful regenerative braking to provide responsive and efficient performance in a wide range of driving situations.

Fuel efficiency is further aided by a number of features exclusive to the Accord Hybrid and Accord Plug-In. These include an all-aluminum front subframe, which replaces the steel-and-aluminum subframe used on the conventional Accord and an aluminum rear bumper beam, which helps offset the additional weight of the rear-mounted battery pack while also improving front-to-rear weight balance.

**Base model estimated mpg:** 50/45  
**Estimated starting price:** \$29,155

**2015 HONDA FIT**

The 2015 Honda Fit is completely redesigned from the ground up to deliver an unparalleled combination of style, interior space, fun-to-drive performance and fuel efficiency plus leading-edge safety and vehicle connectivity.

The 2015 Fit debuts with a sleek, modern and sporty exterior style. A more aggressive front fascia showcases a new grille and headlight design. A strong character line runs along the side of the Fit, emphasizing the vehicle's aerodynamic profile.

Larger 16-inch tires outfitted

to an all-new efficient platform that incorporates a unique center-mounted fuel-tank layout. With the Honda-exclusive Magic Seat offering multiple configurable seating positions, the Fit provides 52.7 cubic feet of cargo space when the second row seats are folded flat.

The 2015 Fit marks the U.S. debut of an all-new direct-injected 1.5-liter i-VTEC engine. Generating 130 horsepower and 114 lb.-ft. of torque, engine output is increased by 13 horsepower and 8 lb.-ft. compared to the outgoing engine. Paired to two new transmissions, a slick-shifting 6-speed manual or a Continuously Variable Transmission with available paddle shifters, the Fit powertrain offers superior acceleration and passing performance.

**Base model estimated mpg:** 33/41  
**Estimated starting price:** TBA

**2014 HONDA PILOT**

Designed as the "Ultimate Family Adventure Vehicle," the award-winning Honda Pilot combines a high degree of practicality with its versatile and functional

cabin, a choice of 2- or 4-wheel drive, and up to 4,500 pounds of towing capability.

The 2014 Pilot is available in four trim levels: LX, EX, EX-L (leather) and Touring. The Pilot is powered by a refined 250-horsepower 3.5-liter i-VTEC V-6 engine, and is available in both 2WD and 4WD.

The Pilot's advanced V-6 engine offers Variable Cylinder Management. The VCM system allows the V-6 engine to operate in 6-cylinder mode for maximum power and in either 4-cylinder or 3-cylinder mode for increased efficiency.

A standard 5-speed automatic transmission features Grade Logic Control to help maintain the most appropriate gear when climbing or descending steep grades, helping minimize gear "hunting."

Bold and expressive, practical and elegant, the 2014 Pilot presents its own unique blend of function and style. The Pilot's grille and front fascia feature a distinctive 3-bar horizontal design, while



2015 Ford Mustang.

system and engine compartment.

The 2014 Edge is available in four series: SE, SEL, Limited and Sport. The latest-generation SYNC system with MyFord Touch features Wi-Fi capability, text-to-voice, HD Radio with iTunes Tagging and voice-activated Navigation System.

Ford's leading safety, security and driver-assist features include: AdvanceTrac with Roll Stability Control; Safety Canopy System, a side air curtain technology offering protection for the first and second seating rows; SOS Post-Crash Alert System; Blind spot mirrors and available Blind Spot Information System.

**Base model estimated mpg:** 19/27  
**Estimated starting price:** \$27,800

**2014 FORD FOCUS ELECTRIC**

The Focus Electric is designed to offer enough range to cover the majority of daily driving habits of motorists. It has an EPA-estimated rating of 110 MPGe with the capability of traveling up to 76 miles on a single charge and delivering a top speed of up to 84 mph.

A full recharge takes four hours with a 240-volt charge station. Features and technologies include a unique version of the MyFord Touch driver connect system especially for electric vehicles, a new value charging feature that identifies nonpeak utility cost times to charge their vehicles, and MyFord Mobile, both a smartphone and website that helps plug-in owners control their vehicles remotely.

The sleek and stylish five-door hatchback leverages Ford's global C-car platform shared by the gasoline and diesel-powered Focus models. Not only is Focus Electric designed to provide outstanding energy efficiency and reliable operation, it also delivers real driving enjoyment. The all-electric powertrain and single-speed transmission provide immediate responsiveness and smooth acceleration when the driver pushes down the accelerator.

to create the perfect Mustang at any time.

The clean-sheet design of the 2015 Mustang fastback and convertible evokes the essential character of the brand, retaining key design elements -- including the long sculpted hood and short rear deck -- with contemporary execution.

With more options to choose from, there is a Mustang to fit any lifestyle. The upgraded V6 and V8 are joined by an all-new 2.3-liter EcoBoost engine that brings state-of-the-art technology to Mustang.

Mustang GT continues with the latest edition of the throaty 5.0-liter V8, now featuring an upgraded valvetrain and cylinder heads that yield more than 420 horsepower and 390 lb.-ft. of torque.

Mustang features all-new front and rear suspension systems. At the front, a new perimeter subframe helps to stiffen the structure while reducing mass, providing a better foundation for more predictable wheel control that benefits handling, steering and ride.

The new double-ball-joint front MacPherson strut system also enables the use of larger, more powerful brakes. At the rear is an all-new integral-link independent rear suspension. New aluminum rear knuckles help reduce unsprung mass for improved ride and handling.

**Base model estimated mpg:** TBD  
**Estimated starting price:** TBA

**2014 GMC YUKON**

The GMC Yukon / Yukon XL family of full-size SUVs, including the premium Yukon Denali and Yukon XL Denali, offer room for up to nine passengers and the capability -- and space -- to haul their cargo.

All Yukon and Yukon Denali models are offered in 2WD and 4WD configurations (2WD and AWD with Denali). A third-row seat is standard on all Yukon models. Yukon models feature a 116-inch wheelbase and overall length of 202 inches, which enables up to

comes to towing capability, Yukon has a maximum rating of 8,500 pounds and Yukon XL is rated at 8,100 pounds.

Yukon and Yukon XL feature the bold, chrome-trimmed grille that is a signature of the brand. Attention to detail is evident in the premium headlamp elements and precise gaps between body panels.

The third-row seats fold flat and are easily tumbled forward or removed for maximum cargo area. Also, the center console stor-



2014 GMC Yukon

age compartment, at 0.8-cubic-foot of capacity, is the segment's largest.

**Base model estimated mpg:** 15/21  
**Estimated starting price:** \$42,995

**2014 HONDA ACCORD HYBRID**

The 2014 Accord Hybrid is the latest model in the completely redesigned ninth-generation Accord lineup, Honda's best-selling model in America.

Utilizing the same Earth Dreams Technology powertrain architecture as the Accord Plug-In, Honda's first two-motor hybrid powertrain, the Accord Hybrid is designed to deliver outstanding

with a new 5-spoke wheel design give the Fit a planted and sporty stance. In the back, rear reflectors and LED taillights run along the hatch with a chrome tailgate garnish and rear diffuser, all contributing to the Fit's more substantial and dynamic appearance.

Retaining a similar exterior footprint to the current model, the new Fit is slightly shorter (1.6 in.) and wider (+0.3 in.) with a longer wheelbase (+1.2 in.), resulting in improved handling and maneuverability.

The Fit builds on its already class-leading interior space, airy cabin and large greenhouse thanks

multi-reflector halogen headlights and integrated turn signals contribute to the premium look.

Eighteen cubic-feet of cargo space behind the third row seats matches or exceeds the trunk space of a typical large sedan. For maximum cargo space, the second and third rows fold flat to provide 87.0 cubic-feet of total cargo space and sufficient width for carrying 4-foot-wide items such as sheets of plywood or drywall.

Sophisticated design, high-quality materials, advanced electronic features, and low noise, vibration and harshness provide a comfortable and enjoyable

experience. The roomy accommodations include 16 different seating configurations for the 60/40 split-folding second- and third-row seats.

**Base model estimated mpg:** 18/25  
**Estimated starting price:** \$29,670

**2014 HYUNDAI GENESIS**

Hyundai's Genesis sedan continues building upon its segment leadership position with the arrival of the 2014 model. Part of this segment leadership is the highest initial quality in the midsize premium car segment, awarded by the 2013 J.D. Power Initial Quality Study.

The heart of the Genesis 5.0 R-Spec is the 5.0-liter Tau V8 engine producing 429 horsepower and 376 lb. ft. of torque. The Tau V8 engine family has been named to the prestigious Ward's Ten Best Engines list three times.

In keeping with Hyundai engineering philosophy, the R-Spec also includes more aggressive chassis tuning, matching its corresponding powertrain enhancements for optimal dynamic balance. The R-Spec offers a unique sport design 19-inch alloy wheel with premium machined finish. The R-Spec steering calibration has been matched to this unique wheel combination for optimized performance and driving refinement expectations in this segment.

In keeping with its 5.0-liter V8 sibling, the Genesis 3.8-liter Lambda engine also has direct-injection technology and produces 333 horsepower and 291 lb.-ft. of torque. All 3.8-liter engines are coupled to the same eight-speed automatic transmission as the 5.0 R-Spec.

For 2014, the Genesis 3.8 receives a standard 18-inch alloy wheel, replacing the former standard 17-inch alloy wheel for a more premium appearance.

From the front view, Genesis has an aggressive front fascia with large intake openings and LED lighting accents. In addition, the mirrors incorporate power-folding and puddle lamp functions, while the side window trim has a decidedly sporty brushed aluminum finish.

Genesis offers an optional 8-inch Driver Information System display with navigation and an enhanced multi-media controller. **Base model estimated mpg:** 18/27  
**Estimated starting price:** \$35,200

**2014 HYUNDAI VELOSTER**

Hyundai's convention-shattering Veloster adds even more convenience, safety and performance for 2014, further increasing the appeal of the popular sporty coupe.

Both Veloster and Veloster Turbo models feature cutting-edge powertrain technologies like direct injection, optimizing their appeal to youthful customers by combining excellent fuel economy, spirited performance and low emissions without compromise.

Veloster's unique design takes inspiration from a high-performance sport bike. Veloster has distinctive black A-pillars that give the glass a motorcycle helmet visor appearance. In the front is an aggressive form of Hyundai's signature hexagonal front grille, hood scoop detailing, and unique Hyundai-signature LED position lights.

Inside, the center stack and controls resemble a sport bike fuel tank and incorporate an available push-button starter. The air vents are inspired by motorcycle tailpipes, while the floor console mirrors the seat of a bike. Metallic accents abound throughout the interior. Alloy pedals and a leather wrapped steering wheel and shift knob are also available.

Veloster combines the style of a coupe and the functionality of a hatchback, while also incorporating an additional passenger-side door.

The Gamma 1.6-liter four-cylinder engine is the smallest Hyundai engine to use direct injection. This technology helps deliver more power, superior efficiency, lower emissions and higher reliability. The 1.6-liter engine with manual transmission delivers a peak output of 138 horsepower and maximum torque of 123 lb.-ft. The 1.6-liter turbocharged, direct-injected four-cylinder engine produces 201 horsepower and 195 lb.-ft of torque. 2014 Veloster Turbo models add Active Sound Design to enhance intake and exhaust powertrain sound character inside the cabin for an even more involving driving experience.

**Base model estimated mpg:** 27/37  
**Estimated starting price:** \$17,800

**2014 JAGUAR F-TYPE**

The new 2014 Jaguar F-TYPE represents a return to the company's heart: a two-seat, convertible sports car focused on performance, agility and driver involvement.

The 2014 F-TYPE is a true two-seat sports car, equipped with a modern, lightweight soft top that, when lowered, serves as its own tonneau cover. The top can be fully raised or lowered

in just 12 seconds at speeds of up to 30 mph. Its multi-layer construction includes a Thinsulate lining for optimal thermal and sound-insulating properties.

Jaguar cars have always defined sinuous, muscular elegance, and the F-TYPE continues -- and advances -- this tradition with new, assertive design language. Two "heartlines" define, in just two bold strokes, both the profile and top-down view of the F-TYPE.

The main "heartline" theme begins in the blade dissecting the shark-like gills on either side of the grille. This first heartline runs up and forms the sharp top crease of the fender line, which provides sight lines that aid the driver in cornering maneuvers.

The second "heartline" swells out to form the muscular rear haunch before sweeping dramatically around the rear of the car. The clean, sleek lines of the tail are made possible in part by the inclusion of an active rear spoiler that deploys at speed to reduce aerodynamic lift.

The F-TYPE showcases the new supercharged Jaguar engines, a 3.0-liter supercharged V6 in 340-hp and 380-hp variants and the 5.0-liter supercharged V8 in the F-TYPE V8 S with 495-hp and 460 lb.-ft. of torque. All are equipped with the new Intelligent Stop/Start system to enhance fuel economy under certain driving conditions.

**Base model estimated mpg:** 19/27  
**Estimated starting price:** \$81,000

**2014 LAND ROVER RANGE ROVER SPORT**

Land Rover's all-new Range Rover Sport is engineered to meet and exceed the most stringent global safety standards. The body has been engineered



2014 Range Rover Sport

to withstand the same punishing off-road use as all Land Rover vehicles.

The new Range Rover Sport features enhanced body geometry to handle all terrain conditions, with 2.3 inches more ground clearance than the previous model at 11.2 inches and generous approach and departure angles. Wading depth has been improved significantly to 33.5 inches.

The chassis has been engineered to deliver dramatically improved on-road driving dynamics, with connected and agile handling complemented by enhanced ride and refinement.

The control layout has been significantly simplified, with 50 percent fewer switches than before. The main instrument cluster consists of clear analog gauges with a 5-inch TFT display, while on certain high specification models a new 12.3-inch high-resolution TFT virtual gauge display is available.

The 2014 Range Rover Sport vehicle enhances its status through the introduction of the next-generation version of Land Rover's Terrain Response system 3. The new system is able to

switch completely automatically between the five settings: General, Grass/Gravel/Snow, Mud/Ruts, Sand and Rock Crawl.

The all-new Range Rover Sport features a choice between a new 340-hp, 3.0-liter supercharged V6 engine and a formidable 510-hp, 5.0-liter supercharged V8 from the Range Rover Supercharged. Both Range Rover Sport engines are paired with the advanced electronically controlled ZF 8HP70 8-speed automatic gearbox.

With go anywhere capability and a towing capacity of over 7,700 pounds, the Range Rover Sport offers the versatility for the most adventurous personal and family outings.

**Base model estimated mpg:** 17/23  
**Estimated starting price:** \$63,495

**2014 LINCOLN MKZ HYBRID**

The 2014 Lincoln MKZ Hybrid offers the highest mpg of any luxury vehicle in America -- an EPA-estimated 45 mpg city, highway and combined. Invigorating driving dynamics, elegant design and premium materials complete the luxury experience.

The Lincoln MKZ Hybrid seamlessly orchestrates the performance of the 2.0-liter Atkinson Cycle four-cylinder

engine, lithium-ion battery, permanent magnet electric traction motor and powersplit electronically controlled continuously variable transmission to deliver optimum performance and fuel economy. The system produces a net 188 horsepower. The 70-kilowatt electric traction motor alone can power the car up to 85 mph.

The engine can operate independently of vehicle speed, charging the lithium-ion battery or providing power to the wheels as needed. Regenerative braking captures and recovers more than 95 percent of the friction energy normally lost through braking, storing it in the battery. The advanced lithium-ion battery pack provides total energy of 1.4 kWh and includes a converter to power vehicle accessories.

The standard Hybrid Premiere equipment group features SYNC with MyLincoln Touch with 8-inch touch screen, premium leather-trimmed seats (heated front seats), class-exclusive LED headlamps, 18-inch

premium painted wheels and Lincoln Drive Control. Always on, Lincoln Drive Control orchestrates the performance of the Continuously Controlled Damping adjustable suspension, electric power-assisted steering and Active Noise Control. This ensures true Lincoln dynamic characteristics -- an unsurpassed combination of refined ride and engaging driving dynamics. Performance-oriented tires and a final drive ratio of 2.91:1 provide spirited off-the-line performance.

**Base model estimated mpg:** 45/45  
**Estimated starting price:** \$36,190

**2015 MERCEDES-BENZ GLA**

The all-new Mercedes-Benz GLA impressively reinterprets the compact SUV segment. It effortlessly masters today's driving and is also robust enough for off-road excursions. The 2015 GLA-Class arrives in showrooms

in the fall of 2014. A modern four-cylinder engine with turbocharging and direct injection, as well as an ECO start/stop function as standard, make for superior efficiency. The 2015 GLA-Class is the first Mercedes-Benz SUV to be available with the new-generation permanent all-wheel-drive system 4MATIC, with fully variable torque distribution. The 2015 GLA250 4MATIC features a turbocharged 2.0-liter four-cylinder engine that generates 208 horsepower and 258 lb.-ft. of torque. The GLA250 4MATIC sprints from 0-to-60 mph in only 6.4 seconds. The engine is mated to a 7-speed dual clutch automatic transmission, which unites comfort and sportiness. The front-wheel drive GLA250 will be available in early 2015. Powerdome grace the hood as sporty highlights and the twin-louver grille accentuates the vehicle's width. An impressive front face is ensured by the headlamps and available LED daytime running lamps. The front bumper features diamond-pattern grilles in front of the cooling air intakes. The standard fog lamps are integrated into the front bumper. A simulated skid plate and contrasting dark-grey sill panels all-around emphasize the SUV characteristics of the GLA. The panels begin low down at the front bumper and provide protection against stone impact. The GLA has a flexible and variable interior. The rear seat backrests fold down completely, and the generous luggage compartment is well laid-out and can be loaded without difficulty thanks to the low loading sill and the wide tailgate, which can open automatically as an option.



2014 Mini Countryman

in the fall of 2014.

The 2015 GLA250 4MATIC features a turbocharged 2.0-liter four-cylinder engine that generates 208 horsepower and 258 lb.-ft. of torque. The GLA250 4MATIC sprints from 0-to-60 mph in only 6.4 seconds. The engine is mated to a 7-speed dual clutch automatic transmission, which unites comfort and sportiness. The front-wheel drive GLA250 will be available in early 2015.

Powerdome grace the hood as sporty highlights and the twin-louver grille accentuates the vehicle's width. An impressive front face is ensured by the headlamps and available LED daytime running lamps.

The front bumper features diamond-pattern grilles in front of the cooling air intakes. The standard fog lamps are integrated into the front bumper. A simulated skid plate and contrasting dark-grey sill panels all-around emphasize the SUV characteristics of the GLA. The panels begin low down at the front bumper and provide protection against stone impact.

The GLA has a flexible and variable interior. The rear seat backrests fold down completely, and the generous luggage compartment is well laid-out and can be loaded without difficulty thanks to the low loading sill and the wide tailgate, which can open automatically as an option.

**Base model estimated mpg:** TBD  
**Estimated starting price:** TBA

**2014 MINI COUNTRYMAN**

The 2014 Mini Countryman is a modern crossover vehicle. Equipped with four doors and a four-wheel-drive system known as Mini ALL4, the Countryman offers more passenger space than any other Mini vehicle.

For 2014, the Mini Countryman comes standard with heated mirrors and washer jets. There will only be one premium package moving forward, which will include the dual pane panoramic sunroof, rain sensor/automatic headlight control and automatic climate control.

A new package, called City Pack, is offered on all models and includes the alarm system, power fold mirrors, heated mirror and wash jets, auto dimming rear-view mirrors (interior and exterior), rear park distance control and comfort access.

The Center Rail in the 2014 Countryman is replaced by standard double cupholders in the rear seats. The Countryman's cupholder includes a 12V charging/power outlet. Door inserts help to enhance the car's premium ambience, comfort levels and practicality. Door armrests provide an even more comfortable place to take the weight of your arms, and the controls for the electric windows are positioned in the door trim. A full control panel is integrated into the door armrest on the driver's side. The switches clustered here include the controls for all the windows, the deactivation facility for the rear window controls and the adjustment for the exterior mirrors.

The Mini Countryman comes as standard with a three-seat rear bench, while a pair of individual seats are available as a no-cost alternative. Three gas and two diesel engines are available. The selection of gas variants ranges from the Mini One Countryman developing 98 horsepower and Mini Cooper Countryman (122 hp) to the 184-hp Mini Cooper S Countryman. The gas models are joined in the line-up by the diesel-powered Mini One D Countryman (90 hp) and Mini Cooper D Countryman (112 hp).

**Base model estimated mpg:** 24/31  
**Estimated starting price:** \$22,100

**2014 TOYOTA YARIS**

The fun, efficient Toyota Yaris continues into 2014 in three-door or five-door liftback models. Sport styling, outstanding safety features and high fuel economy ratings make the Yaris a compelling choice in its segment.

The Yaris Liftback features a sporty look. The 98.8-inch wheelbase yields a smooth ride and roomy interior, while an overall length of 153.5 inches helps make the Yaris highly maneuverable in tight situations. Compared to the previous-generation Yaris, the current model offers up to 68 percent more cargo room along with additional headroom and passenger volume, all within a highly aerodynamic body yielding a 0.30 coefficient of drag.

The 2014 Yaris is offered in three grades, with the entry-level L and value-packaged LE editions available either as a three-door liftback or five-door liftback. The sport-tuned SE is available only as a five-door.

Among other changes to the Beetle, the TDI with Sunroof model is removed from the lineup, while a rearview camera is available on the Sunroof, Sound, and Navigation trim levels on the Beetle, Beetle TDI Clean Diesel, and Beetle R-Line models.

The designers wanted to develop the latest Beetle around the profile of the earliest cars rather than the 1998 New Beetle. It's a car that respects the past but looks toward the future.

**Base model estimated mpg:** 22/31  
**Estimated starting price:** \$19,995

**2014 VOLKSWAGEN PASSAT**

The 2014 Volkswagen Passat is a midsize sedan with the space and comfort of many full-size models, offering remarkable, best-in-class, stretch-out rear-seat legroom and trunk space to match.

soft-touch dash highlight a more premium, sporty interior. The front seats are now wider, and sculpted to help reduce fatigue on long trips.

**Base model estimated mpg:** 30/37  
**Estimated starting price:** \$14,430

**2014 VOLKSWAGEN BEETLE**

For 2014, the Beetle range receives a number of enhancements, trim line changes, and a new special edition model, the GSR.

The base Beetle's 2.5-liter engine will be phased out later in the 2014 model year and replaced by a new turbocharged 1.8-liter four-cylinder engine. It produces 170 horsepower and 184 lb.-ft. of torque. Electro-mechanical power steering replaces the 2.5's hydraulic setup. All Beetle models now have a multilink rear suspension, replacing the torsion beam setup on the base 2.5 and TDI models.

The 2014 GSR is a modern re-interpretation of the 1970s GSR (Yellow Black Racer). The body and the R-Line bumpers on the new GSR are predominantly yellow, the hood is mainly black, and the trunklid, roof, and the exterior mirror caps are all black. The new car has yellow/black stripes with "GSR" lettering above the side skirts and a large rear spoiler to complete the look. The car rides on 19-inch "Tornado" aluminum-alloy wheels shod with 235/40 tires.

The Beetle Turbo lineup is renamed as the R-Line for 2014, adding aggressively styled bumpers front and rear as well as R-Line exterior badging and R-Line door sill kickplates. The top R-Line Sunroof and Sound with Navigation also features unique 19-inch aluminum-alloy wheels, Bi-Xenon headlights with LED DRLs, and leather seating surfaces; black interiors also get an R-Line badge on the steering wheel and a metallic finish dash pad.



2014 Toyota Yaris

All models are powered by a 1.5-liter four-cylinder engine producing 106 horsepower and 103 lb.-ft. of torque. The broad torque curve provides plenty of response for both manual transmission and automatic transmission vehicles.

Both the front MacPherson-strut and rear torsion-beam suspension is tuned to deliver a smooth ride and engaging driving feel. Electric power steering provides good road feel at highway speeds while aiding low-speed parking maneuvers.

The bold and assertive presence of the Yaris design is visible from all angles, starting with the distinctive protruding front profile with wide headlamps and integrated turn signals.

Sound-absorbing and insulating materials make for a quieter ride. Upgraded fabrics and a

Under hood, the 2.5-liter five-cylinder engine will be gradually replaced by a brand new 1.8-liter turbocharged and direct-injection four-cylinder engine. The engine makes 170 horsepower (the same as the 2.5L) and 184 lb.-ft. of torque (7 lb.-ft. more, delivered lower in the rev range).

The Passat TDI version delivers an EPA estimated 43 miles per gallon on the highway with the manual transmission, giving a range of almost 800 miles.

VW engineers also made some other significant mechanical improvements for 2014. On the cars fitted with the 1.8T engine, the hydraulic power-assisted rack-and-pinion steering has been replaced by an electric-assist system.

Volkswagen introduces its VW Car-Net connected services on the Passat lineup. It offers a wealth of security and convenience features, including Automatic Crash Notification, roadside assistance services, and stolen vehicle location assistance. In addition, VW Car-Net adds: remote vehicle access; boundary and speed alerts; a vehicle health report; and an enhanced POI service on vehicles equipped with a navigation system.

The Passat's clean design, with a predominance of horizontal body elements, reinforces its position as the sophisticated choice in the midsize segment. The Passat's grille is sculpted in a three-dimensional shape and makes a distinctive and elegant impression because of its strict geometry.

There's room for five adults to really stretch out in comfort. And with four large, wide-opening doors, getting in and out is a breeze. The instrument panel is similar to that of VW's flagship model, the Touareg.

**Base model estimated mpg:** 22/32  
**Estimated starting price:** \$20,845

**2014 VOLKSWAGEN TOUAREG**

The 2014 Volkswagen Touareg offers advanced, fuel-saving technologies, a premium driving experience, and now, a dynamic new R-Line trim. The 2014 Touareg range also features both the world's first supercharged gasoline hybrid and a TDI Clean Diesel model.

For 2014, the most significant addition to the Touareg family is the performance-inspired R-Line, which adds a host of dynamic and sporty features -- including a sport-tuned suspension -- to the long list of standard equipment already offered on the Touareg Lux trim.

Executive and Hybrid trims now offer two new features. The first is a hands-free easy-open trunk feature, which opens the liftgate with a swipe of a foot under the rear bumper and keys in pocket. The second is the available Area View 360-degree exterior camera system.

Key design elements include a grille featuring twin chrome-faced strips that connect seamlessly to trapezoidal headlight housings. These feature a dramatic U-shaped ring of bright-white LED Daytime Running Lights, along with Bi-Xenon high intensity gas-discharge headlights.

The Touareg R-Line adds an aggressive exterior appearance distinguished by unique front bumper fascia, side skirts, R-Line badges, LED taillights, and oval-shaped dual exhaust tips at the rear.

The 3.6-liter VR6 FSI gasoline engine is one of the most powerful that Volkswagen builds. It produces 280 horsepower and 265 lb.-ft. of torque and is coupled with the eight-speed automatic transmission, which is standard on all 2014 Touareg models.

The 3.0-liter turbocharged V6 engine in the TDI Clean Diesel now produces 240 horsepower and delivers a mighty 406 lb.-ft. of torque from just 2000 rpm. The Touareg Hybrid pairs a 3.0-liter 333-horsepower supercharged, direct-injection V6 gasoline engine with a 47-horsepower electric motor.

**Base model estimated mpg:** 17/23  
**Estimated starting price:** \$43,995