

ARIZONA DRIVER

THE ENTHUSIAST'S GUIDE TO LIFE BEHIND THE WHEEL

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EVENTS : ARIZONA AUCTIONS • FISHER CRAFTMAN'S GUILD
• DETROIT AUTO SHOW • CHICAGO AUTO SHOW
VEHICLES : AUDI • BMW • FORD • INFINITI • KIA
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- Don Williams,
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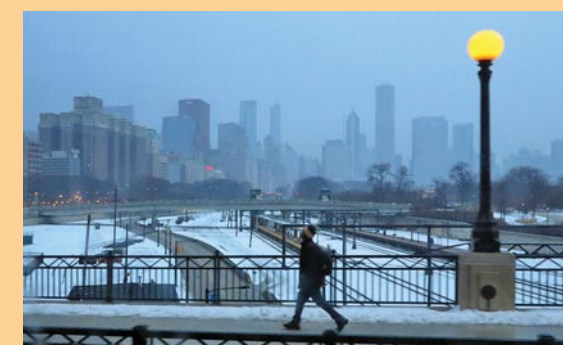
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COVER: The 2014 Subaru Forester 2.0XT Turbo wraps up its track time at Inde Motorsports Ranch near Willcox, Arizona, some 80 miles east of Tucson, next to a Douglas A-4 Skyhawk, one of several classic fighter jets on display at the private motorsports club track. Photo: Joe Sage.



START YOUR ENGINES : FROM THE PUBLISHER

We like to cover some good healthy road-tripping in this magazine as much as we like to cover cars. Ironically, a lot of that can take us beyond the borders of our state, but we know you will often do the same thing, so this works out just fine. In this issue, also ironically, a great deal of travel brings a great many people into our state. We have the January collector car auctions, which place Arizona at the pinnacle of the hobby-slash-industry at the start of every year, with ripples that endure throughout. Fortunately, the more auctions we host—now up to six—the more variety we get. These are covered in this issue by **Larry Edsall**, along with tips and trends from experts in the field. Larry also covers an event of unusual wonder, as gifted teens of the '50s and '60s reconvene at the Arizona Biltmore as, well, adults, to show off the futuristic concept models they developed at that time for GM's Fisher Body Craftsman's Guild.

Some of our travel isn't quite road-tripping, but rather air-dropping to various locales for new vehicle launches. Hence, you may see Southern California in our pages, or you may see Texas or even Vermont at some point. This time around, we have three such "trips," and every one of them took place right here in our home state: two based in metro Phoenix (Kia in Scottsdale and Toyota in Carefree) and one near Tucson (the Subaru Forester, including its track-ready turbo on the race course in Willcox).

We do bring you news from Detroit's North American International Auto Show, then from the Chicago Auto Show, which we attended for the first time.

We dashed from point to point in a variety of new vehicles, also covered herein, from Audi, Infiniti, Ford, Volvo, Lexus, Subaru and BMW—including a Christmas Eve blizzard dash north, in the Audi.

Enjoy the ride.

Joe Sage

Publisher/ Executive Editor

Photo: Brenda Priddy



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MAGAZINE

PUBLISHER / EXECUTIVE EDITOR: Joe Sage

CONTRIBUTING WRITERS:
 David Boldt Nick Calderone
 HR Driver Larry Edsall
 JP Molnar John Priddy
 Jim Prueter Steve Purdy
 Barbara and Bill Schaffer
 Tim and Kristin Sharp
 Jan Wagner Kevin A Wilson

CONTRIBUTING PHOTOGRAPHERS:
 Randall Bohl Christina Lawrie
 Chris Marzoni Brenda Priddy
 Jan Wagner

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 www.arizonadrivermagazine.com
 letters@arizonadrivermagazine.com

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BONHAMS



Auction sales up, calendars expand

By Larry Edsall / Photos Joe Sage

Arizona's annual classic and collector car auctions—there were six of them in January 2013—generated more than \$230 million in sales, an amazing 25 percent increase compared to the same events a year earlier.

More than half of all sales were completed at the two locally-owned events, with Barrett-Jackson posting nearly \$109 million in sales and with Russo and Steele at \$17.5 million. In addition to their sales totals, Barrett-Jackson and Russo and Steele announced the establishment of three new actions—one in California and two in Nevada—starting this summer.

Among the highlights of the January sales were two Ferraris that each sold for more than \$8 million and the original Batmobile, which brought \$4.62 million.

Here are the details:

Barrett-Jackson 42nd Annual Collector Car Auction Event

Barrett-Jackson's Scottsdale classic car auction—this was the 42nd annual—has earned its reputation as the world's greatest collector car event, annually offering more than one thousand vehicles for sale in a state fair-like environment that includes test drives in some of Detroit's newest high-performance cars and a lifestyle midway that attracts many of the 300,000 who attend the event each January.

For the second year in a row, Barrett-Jackson offered a special auction within the auction. During prime time on Saturday evening, the block is reserved for what Barrett-Jackson calls its Salon Collection, the 5000 Series lots, the most desirable high-end cars, cars so special that many of their owners cannot risk the whims of the market, even in the often frenzied bidding atmosphere within the auction's main arena. Many of these 5000 Series cars are worth into seven figures and are offered with a "reserve" price, a secret minimum amount bidders must offer before the car actually is released for sale.

Cars that cross the block but don't reach their reserve and thus are not hammered "Sold!" don't make for exciting live television, and thus a no-reserve format is used for most of the Barrett-Jackson auction, much of which is televised by the Speed channel.

But for a few hours on Saturday night, not knowing whether a car will sell seems to add to the drama, especially when someone reveals that the reserve has

been met and the car will, indeed, be sold.

Overall at its Scottsdale sale this year, Barrett-Jackson sold more than 1,300 vehicles for nearly \$109 million dollars, with some \$5 million of that total going to charities. Those are remarkable figures, but so is the fact that the Salon Collection of a few more than 50 vehicles generated \$29.2 million in sales.

And Barrett-Jackson's total could have been even higher, except that two Salon cars—bid respectively to \$1.8- and \$1.1 million—fell short of their owners' reserve prices.

The most dramatic moment of the auction came when George Barris sold the Batmobile he created for the 1960s television series. Ford sold Barris a concept car—the Lincoln Futura—for \$1 and Barris spent around \$15,000 turning it into a TV star. The car, now an American cultural icon, sold at Barrett-Jackson for \$4.62 million.

Another car with Hollywood history—Clark Gable's 1955 Mercedes-Benz 300SL "Gullwing"—brought \$2.35 million, the same amount someone paid for a 1947 Talbot-Lago T-26 Grand Sport. A Murphy-bodied 1934 Duesenberg J custom Beverly sedan sold for \$1.43 million, a 1956 Chrysler Diablo concept car went for \$1.375 million, a 1971 Plymouth Hemi 'Cuda convertible brought \$1.32 million, and a Saatchi-bodied 1949 Delahaye Type 175 Coupe de Ville sold for \$1.2 million.

The Saturday evening action included the first public sale of a new 2014 Chevrolet Corvette. General Motors donated the car to benefit the College of Creative Studies in Detroit. The high bid was \$1.05 million, with delivery to take place as the car reaches dealerships later this year.

Barrett-Jackson also announced that while it will not return to California's Orange County for an auction in 2013, it will stage a new auction as part of the annual Hot August Nights automotive celebration that takes place in August in Reno and Lake Tahoe, Nevada.

Barrett-Jackson auctions are held in Scottsdale (January), Palm Beach (April), Reno-Lake Tahoe (August) and Las Vegas (September). www.barrett-jackson.com

Bonhams 2nd Annual Scottsdale Auction

Bonhams, the Britain-based global auction company known since 1793 for its fine art and other sales, joined the Arizona auction scene in 2012 but sold only 40 vehicles at an event that generated less than \$6 million in sales. Undaunted, Bonhams returned in 2013, brought a well-populated catalog—including more than 30 vehicles from the collection of the Oldenburg horse-breeding family—and reported the sale of 92 vehicles for nearly \$13 million.

"It was a tremendous auction, and everything worked beyond our expectations," said James Knight, motoring director for the Bonhams Group. "The auction total and sale statistics were exemplary, and we serviced one of the largest audiences at one of our US auc-

KEEP RIGHT >>



Photos: Randall Bohl

The Phoenix Automotive Press Association (PAPA) moderated a discussion of trends in classic car collecting, featuring Petersen Automotive Museum curator Leslie Kendall; Mel Martin, personal car collector and owner of the Martin Auto Museum; and Rick Carey, auction editor of *Sports Car Digest*.

By Larry Edsall

During Arizona Auction Week, someone paid \$1,350 for a 1994 BMW 5 Series sedan, and someone—presumably someone else—paid \$8.25 million for a 1958 Ferrari 250 GT California Spider. And hundreds, perhaps even a thousand or more other someones paid more than \$1,350 but less than \$8.25 million for each of the other 2,232 classic and collector cars that sold at six venues.

But how does someone decide what to buy and how much to spend on it? And once you have, how do you know when the time is right to sell your cherished cars? To find out, I organized one seminar and attended two others during auction week. Here's what I heard from the experts:

Usually, those experts will tell newcomers that you should buy a classic car because you like it, not because of any investment potential it might promise. Often, that car you like is the one you lusted for while in high school but could not afford to buy.

Oh, and even before you consider buying that first car, you should join a classic car club, get advice from veteran members, compile research into the history and pricing trends of whatever vehicle you pursue, and be sure, be very sure, not to spend more than you can afford.

That's very sound and very traditional advice—buying what you like, what you'll enjoy, and ignoring any long-term investment value. However, one expert we heard this year applied an interesting twist for the car-collecting novice.

"Just buy the first car you see that appeals to you," said Rick Carey, who has been following and writing about the classic car hobby for several decades.

Obviously, Carey continued, you'll soon discover you've made a big mistake. But, he told the Arizona Auction Week Preview hosted by the Phoenix Automotive Press Association, "you will learn so much from making that mistake" that a year later, you can go back to that same auction—or one of the others in town—unload your mistake—hey, it just might be someone else's dream machine—and then make an educated purchase."

Think of the price you paid for that first classic car, and think of any additional money you spend repairing or maintaining or restoring that car, or your membership dues to your local classic car club, as the cost of tuition, a down payment on your happiness in the car-collecting hobby. Oh, and think of that car you buy a year later as the real starting point of your classic car collection.

And once you start your collection for real, unless you're a skilled mechanic, you probably should start with a car that can be repaired with parts available at most auto parts retail stores, the audience of a seminar at the Russo and Steele auction

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Ferrari photo courtesy RM Auctions

tions. We achieved prices at this auction that created new benchmark figures and offered advice to our clients that proved to be wholly founded.”

The high-dollar sale of the one-day event at the Westin Kierland Resort & Spa was \$1,312,500 for a 1938 Mercedes-Benz 540K Cabriolet A.

An Oldenburg car—a 1972 Lamborghini Miura SV—brought \$1.215 million.

A 1930 Bugatti Type 46 Faux Cabriolet sold for \$951,000. A 1968 Ferrari 330GTX Spider went for \$912,500. A 1955 Mercedes-Benz 300SL “Gullwing” wearing stunning Strawberry Red Metallic paint, sold for \$896,000. A 1967 Ferrari 365 GTC Speciale, specially built for Leopoldo Pirelli of the tire-making company, brought \$885,000.

Those six vehicles accounted for nearly half of the total auction sales figure.

▼ Bonhams hosts a variety of fine art, antique and collectors’ auctions worldwide. ▼ www.bonhams.com

Gooding & Company 6th Annual Scottsdale Auction

In 1956, John Jang spent \$3,000 to buy a new Porsche roadster. But just a month later, he was so taken with the new Lancia Aurelia B24S Spider America he saw at his favorite foreign car dealership in San Francisco that he traded his Porsche and added in nearly its value in cash.

Jang and his bride enjoyed the car on drives to Los Angeles and through northern California’s wine country (and never across the state line).

In 1963 the Jangs moved to Sacramento, and got busy starting a new business and expanding their family. Even when one is an infant, three people don’t fit comfortably in a two-seat roadster, so they parked the Lancia in the garage—28,000 miles on its odometer—and there it remained until last December, undriven for 49 years, though the Jangs did install new license plates when California switched from yellow plates to black.

So what is a dusty, torn-seat, low-mileage “garage-found” car worth nearly half a century later?

In the case of the Jangs’ Lancia, which was offered for sale at Gooding & Company’s annual classic car auction here, it was worth \$803,000, about double what was estimated when the auction catalog was being assembled in the weeks leading up to the sale.

As astounding as that figure may be, such sales are not unusual in the short but sensational history of Gooding & Company, which was founded less than a decade ago by David Gooding, who grew up as the son of the curator of one of the country’s best car museums, then worked at Christies and RM before going out on his own.

Gooding & Company appeals to the top end of the classic car collecting hobby by trying to offer “best-of-category” vehicles.

During two days here in January, Gooding sold 101 vehicles for \$52.5 million, including a 1958 Ferrari 250 GT long-wheelbase California Spider for \$8.25 million, a record for classic car auctions in Arizona.

In all, sales totals increased 31 percent compared to Gooding’s 2012 Scottsdale event, and a dozen cars sold for a million dollars or more, with seven at \$2-million-plus. Sales prices for 16 vehicles were world auction-

sale records for those models, including \$3.135 million for a 1959 Porsche 718 RSK, \$3.08 million for a 1957 Maserati 150 GT Spider, \$2.75 million for a 1935 Mercedes-Benz 500 K A convertible, but also \$74,800 for a 1963 Studebaker Avanti.

▼ Gooding & Company stages auctions in Arizona (January), Amelia Island (March) and in Monterey as the official auction of the Pebble Beach Concours d’Elegance (August). ▼ www.goodingco.com

RM Auctions 14th Annual Automobiles of Arizona

Rob Myers was pretty much a kid when he started restoring old cars in a small garage in Blenheim, Ontario. But he quickly showed skill, and as soon as he’d finish a project, he’d sell it and start another. And another and another, and before long Myers needed to hold an auction to offer not only the cars he’d been restoring, but other classic vehicles as well.

It wasn’t long before RM Auctions was offering many of the world’s finest classic vehicles at auctions staged not only in Canada but in the United States and Europe.

Like so many other classic car auction houses, RM opened its 2013 calendar in Arizona, though this year—its 14th in the Valley of the Sun—it tried something different, switching from a two-day sale at the Arizona Biltmore to a one-day event.

“We are very pleased with the results,” said Shelby Myers, Rob’s son and managing director of RM’s US West Coast headquarters in Culver City, California. “We strategically limited our sale this year to a smaller, more exclusive offering than previous years, yet the sales tally for our single-day event was up on our 2012 total by more than 42 percent, a significant increase that reflects not only the exceptional quality of the automobiles presented, but also illustrates the continued strength of the market for ‘best of category’ examples.

“The Arizona auction week is widely regarded as a barometer for the new collector car season; the results from our Biltmore sale paint a very positive forecast for 2013, and we look forward to continuing the momentum at our upcoming sales in Georgia and Florida,” he adds.

At RM’s 2013 Arizona sale, bidders bought 89 percent of the vehicles presented and paid \$36.4 million for them. The sales total was the largest in the company’s 14-year history in Arizona. The quality of the vehicles offered resulted in eight cars selling for more than one million dollars.

The top RM sale—and second by only a few hundred thousand for the entire Arizona auction week—was \$8,140,000 for a 1960 Ferrari 250 GT short-wheelbase berlinetta “competizione” model. With closed bodywork designed by Pinin Farina and constructed by Carrozzeria Scaglietti, the car was the 17th of only 72 such aluminum-bodied racing-prepped Ferraris.

The 250 GT was one of 11 Ferraris in the auction catalog. A 1967 275 GTB/4 sold for \$1,842,500, a 1966 275 GTB went for \$1.32 million, a 2003 Enzo also brought \$1.32 million and a 1954 250 Europa coupe sold for \$1,017,500. Among other sales of note, a 1955 Lancia



Photo: Larry Edsall

Russo and Steele’s 3rd Annual Collector Automobile Seminar—“Market Facts & Influential Trends”—featured (from left) moderator Corky Coker, Casey Annis of *Vintage Racecar*, Tim Suddard of *Grassroots Motorsports*, car collector and financial adviser Roger Rodas, and Russo and Steele CEO Drew Alcazar. The auction also hosted a new Collection Management and Estate Planning Workshop.

was told, both by automotive magazine publisher and car collector Tim Suddard and by Russo and Steele founder and CEO Drew Alcazar.

Sure, a steam-driven Brass Era beauty is a sight to behold, and there’s nothing like the sound of that 1950s 12-cylinder Ferrari. Nonetheless, Suddard’s choice for the newbie would be something such as a mid-1960s Chevrolet Corvette, and Alcazar suggested a similar vintage Ford Mustang. Both said they would recommend such cars because you can display them at car shows, take them on a weekend getaway or drive them on vintage rallies, but also find readily available parts to fix them should anything break while you’re away from home.

“Start slowly,” said Leslie Kendall, curator of the famed Petersen Automotive Museum in Los Angeles. “Join the local club for your make and model.”

Mel Martin’s Martin Auto Museum on the west side of Phoenix isn’t nearly as large or famous as the Petersen, but it’s a local gem and houses everything from the 1917 Douglas dump truck Martin’s great uncle gave him when Martin was still in high school, to the 1930 Duesenberg Model J boat-tailed speedster Martin, now in his early 80s, finally was able to purchase a year or so ago at a classic car auction.

“Do research,” Martin said. “Know the history of what [the cars you’re considering] have been selling for.”

Martin reminded the audience that “there’s a reason someone is selling” that car you’re thinking about buying. Having someone with you who knows about the cars—“if they’re great cars or dogs”—can be a huge help, he added.

Some of those cars may be available because the person who has collected and cared for them has run out of room in his or her garage or even garagemahal and has to sell something to make room for an acquisition, or maybe the owner is a classic car dealer who often sells inventory at auctions, or perhaps the owner has gotten to a late stage in life and simply doesn’t want to burden a spouse, descendants or other beneficiaries with that chore, or with the taxes that can come with such an inheritance.

For example, at another seminar at Russo and Steele, this one on “collection management and estate planning,” Paul Mershon of Phoenix-based Silverhawk Financial said someone inheriting a car collection valued at \$20 million could face \$6 million in taxes, or even more if they have to sell some of the cars to pay that tax bill.

Mershon and Michael Tucker, an attorney from Phoenix who specializes in trusts and estates, reviewed available options for the seminar audience. Those options included charitable remainder trusts and the establishment of an 831(b) captive insurance company. ■

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RUSSO AND STEELE



SILVER AUCTIONS



Aurelia B24S America Spider sold for \$825,000 and one of only seven 1953 Allard JR "Le Mans" roadsters went for \$605,000.

▼ RM's Arizona sale kicked off their 2013 global auction calendar, which includes Amelia Island (March), where they are the official auction house, their annual sale at St. John's in Michigan (July) and many others. ▼ www.rmauctions.com

Russo and Steele 13th Annual Sports & Muscle in Scottsdale

A couple of classic cars selling for more than half a million dollars each and total sales of more than \$17.5 million were not the big news this year at the 13th annual Sports and Muscle auction staged by Russo and Steele. The big news was the announcement that the company will host two additional auctions in 2013—early this summer (June 20-22) at Newport Beach, California, and in the fall (September 26-28) at Las Vegas.

The new events double the company's auction schedule, which usually includes sales here in January and in Monterey in August, as part of the big classic car week on that California Central Coast peninsula.

"Both Scottsdale and Monterey have matured to what we feel exemplifies the Russo and Steele experience," said company founder and CEO Drew Alcazar. "Adding these two new auction events to our mix is a natural progression in our evolution."

That "experience" includes an auction-in-the-round setup. Instead of the typical stage-style, elevated auction block and lecture hall seating arrangement, Russo and Steele sets up its events stadium-style, with bidders and spectators seated around and above the auction floor in bleachers and sky boxes, much like a boxing ring or basketball game, thus putting them closer to the cars as they parade in for bidding.

Unspoken in the company's expansion announcement was the fact that rival Barrett-Jackson is abandoning its own early summer Southern California auction after three years (but will launch a new auction in Reno/Tahoe).

It was three years ago that Russo and Steele's Scottsdale auction was devastated by a powerful sudden storm that felled tents and damaged cars. The auction has rebounded, last year selling 401 vehicles for \$18.2 million and this year more than 420 for \$17.5 million. Though the sales total may have declined slightly in dollars, it increased slightly in volume, which Russo and Steele says is part of a "strategic decision to consign more automobiles that cater to a large spectrum of enthusiasts, gathering more middle-of-the-market inventory instead of an increase in upper six- to seven-figure automobiles." The goal, the company says, is "to maximize the current market climate."

The high-dollar sales included \$727,100 for a 1958 Mercedes-Benz 300SL roadster, \$605,000 for a 1969 Chevrolet Camaro ZL1 coupe, \$253,000 for a 1969 Chevrolet Douglass Yenko Camaro coupe, \$242,000 for a customized 1940 Packard Darrin convertible and \$233,750 for a 1969 Ford Mustang Boss 429.

▼ Russo and Steele auctions are held in Scottsdale (January), Newport Beach (June), Monterey (August) and Las Vegas (September). ▼ www.russoandsteele.com

Silver Auctions 16th Fort McDowell AZ Auction

At Gooding & Company, a 1957 Maserati 150 GT Spider sold for slightly more than \$3 million. Near Fountain Hills, just a few miles to the northeast, Mitch Silver sold 209 vehicles for a total of \$2.8 million.

"I look at the sales that grab the headlines, but I don't see myself ever collecting those cars, and that's the case for a lot of people," said Mitch Silver. "They're fun to see and to talk about, but what I'm looking for is to buy a 1950s convertible or muscle car."

Such people are the primary customers for Silver Auctions, which stages classic car sales in the western US and Canada, plus the occasional sale of a private car collection—or an entire automotive salvage yard. Last October, Silver cleared a wrecking yard in Quartzite, Arizona, of 800 cars and assorted cranes and other equipment in a single day (that's cleared as in sold; by its very nature, the vehicles in a salvage yard are not in running order, so it took a week to truck everything off).

The average price of a car sold at that recent Gooding sale was more than \$520,000. The average at Silver's sale was \$13,628. In fact, the 10 most expensive purchases during the Silver sale (topped by a 1967 Chevrolet Corvette that went for \$62,640) totaled less—\$150,000 less, collectively—than Gooding's average for a single transaction.

But that's part of the charm of the Silver sale, and why people were waiting in line to get onto the grounds and then up to the bidder's registration table at this, the 16th Silver Auction on the grounds of the Radisson Fort McDowell Resort and Casino.

Mitch Silver has been in the classic car auction business for 34 years. While still a professor at Eastern Washington University in Spokane, Silver "saw an ad for an auction in Seattle. I went, and it was the greatest thing I'd ever seen." He went home to Spokane, thought it might be ripe for a classic car auction, and six months later he staged one. And another. And another. And 10 years later, he quit teaching, though in many ways he's still very much in the education business.

Where else, he said, can you sit down and have a classic car come past you every three minutes and have someone who knows about those cars tell you the vehicle's history and technical information?

"It's a very efficient way of shopping," he said, adding that all the while, "you're learning."

Silver Auctions will be back in Fountain Hills in January 2014, and Mitch Silver already knows at least one item that will be a lot more expensive than it was this year. Oh, and it's not a car.

The 2013 Silver Auction drew the largest crowd in the event's long history. Many of those coming through the gate told Silver they were there for the first time—and that they'd be back next year.

So what will be more expensive next year will be rental of a larger tent and a lot more chairs to stage the auction and host the bidders. Actually, though, that's not really such a bad problem for an auction to have.

▼ Silver's next sale is April 12-13 in Portland, Oregon, followed by Spokane, Coeur d'Alene, Missoula and Sun Valley. ▼ www.silverauctions.com



2014 Mercedes-Benz CLA 250

Mercedes-Benz new 4MATIC system for new front-wheel-drive-based CLA

By spring of 2014, Mercedes-Benz will be offering a new variant of their 4MATIC permanent all-wheel-drive system with fully variable torque distribution, based on front-wheel-drive architecture with transversely mounted engines. This 4MATIC system is a completely new development tailored to the requirements of the new models with front-wheel drive. The new 4MATIC will join four other all-wheel-drive systems available to date, each tailored to respective vehicle categories—from the CLA, just revealed at the North American International Auto Show in Detroit and due in showrooms during 2013, to other sedan and coupe Classes, to the range of Mercedes-Benz SUVs. The most innovative components of the new 4MATIC include a power take-off to the rear axle, integrated in the 7G-DCT automated dual clutch transmission and the rear-axle gear with integrated, electrohydraulically controlled multi-disk clutch. This setup enables fully variable distribution of drive torque between the front and rear axles. This design also delivers a lower system weight (up to 25 percent in comparison to rival systems) and high efficiency (via friction-minimized tapered roller bearings). ▼

MINI John Cooper Works Paceman



MINI JOHN COOPER WORKS PACEMAN

▲ The MINI John Cooper Works Paceman combines mouthwatering sporting flair and inimitable style to introduce a new dimension in driving fun to the premium compact segment. Its race-bred powertrain and chassis technology create a recipe for smile-inducing agility, and the overall concept of the first MINI crossover coupe gives it an immediate, show-stealing impact. The MINI John Cooper Works Paceman transfers the power developed by its 208 hp four-cylinder turbocharged engine to the road with poise and assurance, courtesy of its standard ALL4 all-wheel-drive system. Lowered sports suspension and an aerodynamic kit also play their part in bringing an irresistible feeling of race competition to the driver and passengers in their four individual seats.

INTELLIGENT TRANSPORT SYSTEM

Aisin Seiki Co., Ltd exhibited its latest intelligent transport system (ITS) technology at the North American International Auto Show in Detroit. The system includes sensors buried inside the seat to monitor the driver's heart rate, breathing rhythm and general body movements for signs of irregularities, and an infrared camera on the steering column to monitor changes in the driver's facial expressions and gaze for attentiveness and

drowsiness. Aisin Seiki is also developing technology for monitoring the driver's state of mind by measuring brain waves. If the system detects signs of irregular driving, the driver is given an audio warning accompanied by seat vibration. If the driver ignores these warnings, the Human Error Monitoring System automatically applies the brakes and guides the car to a stop on a hard shoulder or roadside. Finally, the System transmits an SOS via the driver's smartphone.

BMW, BOEING AND CARBON FIBER

BMW Group and Boeing have signed an agreement for joint research into carbon fiber recycling, and to share manufacturing and automation knowledge. Both are pioneering the use of carbon fiber in their products. The BMW i3 in late 2013, followed by the BMW i8, will bring two vehicles with a carbon passenger cell to market for the first time. And Boeing's 787 Dreamliner is made of 50 percent carbon fiber material. Recycling composite material at point of use and at the end of the product life therefore is essential to both companies. As part of the agreement, Boeing and BMW will share manufacturing process simulations and ideas for automation. The collaboration agreement between the two companies is the first in the history of either company.

25 YEARS OF ARIZONA ADEQ

Part of our vehicle ownership is passing the emissions inspection every year or two. This is one of many functions of the Arizona Department of Environmental Quality, which is marking 25 years of existence. During these years, pollution in the skies of metropolitan Phoenix has been greatly reduced. Carbon monoxide (CO) levels have fallen 83 percent, dust has declined 40 percent and ozone 6 percent—despite the population of the Valley almost doubling, the number of vehicles almost tripling (an increase of 177 percent) and the number of vehicle miles driven increasing 89 percent on Valley roads since 1987. Among the reasons are ADEQ's Vehicle Emissions Inspection program and cleaner burning fuels, but also various dust control measures within the Valley. Other ADEQ programs include a Monitoring Assistance Program (MAP), which has drastically increased state and federal standards compliance for smaller public water systems; underground storage tank leaks from petroleum products which have been cleaned up and the land returned to beneficial use; the Arizona Aquifer Protection (APP) Program groundwater protection program for drinking water standards; the Brownfields Program

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to rehabilitate contaminated properties into Tempe Marketplace, a key tourist stop (Winslow's Standin' On The Corner Park), the Flagstaff Transit Center and more; electronic waste collection events; a Water Quality Improvement Grant Program keeping over one-third of a million tons of sediment and more than one-third of a million pounds of nitrogen out of state water ; and air quality forecasts have accurately predicted a health watch or high pollution advisory for ozone 70 percent of the time. ADEQ was established in 1987 as a separate cabinet-level agency to administer all of Arizona's environmental protection programs.

VERDE VALLEY ON TOP 10 LIST

▲ Every year Lonely Planet's US-based editors team up with expert authors to compile a list of prime US destinations for the next year. The Lonely Planet Top 10 US Travel Destinations list for 2013 are literally all over the map: once-in-a-lifetime Northern Lights, new top-tier museums, moose trails, Polynesian paradise, barrels of bourbon—and an increasingly discovered wine destination in the high desert of Arizona. Coming in at #9 on the Top 10 list is the Verde Valley, comprising the beautiful and charming towns of Sedona, Cottonwood, Camp Verde, Jerome, Page Springs and Cornville, as well as the Verde

Valley Wine Trail. Robert Reid, Lonely Planet's US travel editor, announced the selection, saying, "The region is beautiful, with green canyons, rimmed by red rocks, and towns like Cottonwood, Jerome, and Sedona that have long drawn visitors for good food, art and mining lore. But the Verde Valley is all about the wine." Wineries of the Verde Wine Trail include Alcantara Vineyards, Page Springs Cellars, Oak Creek Vineyards, and Javelina Leap Vineyards, accompanied by 6 neighboring Tasting Rooms. Family-friendly activities such as horseback riding, kayaking, Jeep tours and mountain bike riding happen year-round in the Verde Valley's temperate four seasons. Whether tying the knot, honeymooning, enjoying a family reunion or that special anniversary, the Verde Valley is the perfect place to escape from the mundane and sample palate-pleasing wine varieties, amid scenery and flowing waters.

PEBBLE BEACH CONCOURS EARLY INFO

The field of cars for the 63rd Pebble Beach Concours d'Elegance is taking shape—from coachbuilt Lincolns exhibiting the continental flair of Edsel Ford, to the classic confections of the Parisian firm Vanvooren, to the charging mounts from Ferruccio Lamborghini that have long defined the term "supercar." Entry

applications were due in January and are now being reviewed and vetted. The Concours Selection Committee meets at the end of March to determine which cars will receive a coveted invitation to the August 18 competition, set as always on the 18th fairway at Pebble Beach Golf Links. Most of the successful applicants will be notified by mid-April. The 2013 Pebble Beach Concours d'Elegance will feature Lincoln, Simplex, Vanvooren, Lamborghini, Aston Martin, Porsche 911, BMW 507 and French motorcycles—as well as some surprises on the show field.

\$18 B IN ELECTRIC VEHICLE INVERTERS

The market for electric vehicle inverters and converters, for both hybrid and pure electric vehicles—land, water and air—is expected to grow to \$18 billion by 2023, according to IDTechEx. Demand for inverters and electric power conversions is already well established in the automation and industrial control industries, which are also growing at considerable pace. The addition of a significant complementary emerging market will create new sectors for existing component suppliers and create opportunities for new players, particularly those with specialist electric vehicle knowledge and those able

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Bentley Continental GT Speed Convertible



to develop added value through highly integrated electric powertrain systems. For sheer volume, inverters in light electric vehicles such as electric bicycles dominate now and still will in 2023, largely in the large industrial cities of Asia. However, by market value in 2023, inverters and converters in passenger vehicles will dominate. A wide range in power and performance requirements, from small low voltage inverters in electric scooters to large high power inverters in hybrid and electric trucks, buses and military vehicles, creates a huge emerging market space and set of market requirements, and thus an opportunity for large numbers of suppliers, with little real possibility of dominance by one provider for now.

BENTLEY GT SPEED CONVERTIBLE

▲ At 202 mph, Bentley's new open-top performance flagship is the fastest four-seat convertible in the world. With a 616-hp 6.0-liter W12 engine, close-ratio, quick-shifting eight-speed transmission and permanent all-wheel drive, the new model boasts a 15 percent increase in driving range and fuel economy, and a 15 percent reduction in emissions. Suspension has been updated and lowered, and steering retuned. Exhilarating acceleration and sharp handling, delivered with ride comfort, are not new to

the brand, but have all been improved. Design cues for the GT Speed include exclusive 21-inch alloy wheels, dark-tinted grilles and "rifled" tailpipes. Inside its handcrafted cabin, the GT Speed convertible features the Mulliner Driving Specification as standard, blending contemporary luxury with a distinctly sporting character. The bodyshell of the Continental GT Speed convertible is exceptionally rigid. Aluminum double-wishbone front suspension and trapezoidal multi-link rear have revised air suspension springs and dampers for improved agility, body control and ride comfort. The self-levelling system is 10 mm lower than the regular Continental GT convertible. The Servotronic steering has also been recalibrated for the Speed specification. The car's ESC system allows increased wheel slip at higher speeds, with torque reinstated quickly after a system intervention, to maintain driver involvement in challenging conditions. A gentle lip on the double-horse-shoe rear deck lid generates all the down-force needed, even at 202 mph. Tested from -22° to 122°F and engineered to resist monsoon-force rain, this all-wheel-driver (with 40:60 rear bias) can take you just about anywhere on-road, any time. A neck warmer lets you keep the top down into cooler conditions.

NEVADA LETS AUDI GO DRIVERLESS

The State of Nevada has issued Audi only the second license allowing testing of autonomous vehicles on the state's public roads—the first for an automotive original equipment manufacturer. The first license went to technology giant Google. Among the early Audi highlights in autonomous driving research was the 2010 running of an Autonomous Audi TTS Pikes Peak research car on the legendary Pikes Peak Hill Climb course in Colorado. That car, developed jointly by the Volkswagen Group Electronics Research Lab in Silicon Valley and Stanford University, completed the 156-turn, 12.42-mile Pikes Peak circuit autonomously in just 27 minutes.

LEGENDS OF RIVERSIDE V

The Riverside International Automotive Museum's annual Legends of Riverside Racing Film Festival and Gala on March 23 starts with a Meet and Greet on Friday evening, March 22 for all ticket holders. The honoree for Legends V is Arizona's own Bob Bondurant. Bob's racing career is legendary, but while recuperating from a 1967 Can Am series accident, he had the idea for a high-performance driving school, which first opened in early 1968 at Orange County Raceway, then moved



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1964 Aston Martin DB5 barn find



to Ontario, then Sears Point and in 1989 to Phoenix. Not only is Bob the honoree at Legends V this spring, but his Bob Bondurant School of High Performance Driving is marking 45 years, and Bob himself turns 80 in 2013. Bob will be joined at Riverside by close to 50 veteran drivers. The event will include special awards for those who contributed so much to our racing heritage, a silent auction of racing memorabilia, an autograph session for ticket holders with drivers and VIPs, cocktail party, dinner, a live auction and an interview by Ed Justice Jr with Bob Bondurant. Only 150 tickets are available to the public, with proceeds going to The Boys Republic. Legends of Riverside is held at the Riverside International Automotive Museum, Riverside, California. Tickets for the 2 day event are \$149. For more information, call 951-369-6966 or visit riversideinternational.org.

BARN FIND DB5 AT BONHAMS

▲ An original-condition "barn find" 1964 Aston Martin DB5 Sports Saloon, which has spent more than 30 years in a garage, is an early consignment for the 14th annual Bonhams sale of Aston Martin and Lagonda cars, to be held at the factory in Newport Pagnell, UK, on May 18. Expected to realize between £150,000-

200,000 (about \$235,000-315,000) when it goes under the hammer in May, the car was most recently bought in 1972 for £1,500 (about \$2400, equal to about £14,000 or \$22,000 today) by Aston Martin Owner's Club member David Ettridge. With less than 48,000 miles on the odometer, the Aston is from a deceased estate, in good condition but in need of restoration. Ettridge used the car in the 1970s, but it has been parked in his garage since 1980—the last time the engine had been started. However, after careful preparation (and the removal of a mouse's nest), the car's engine was fired up after 30 plus years of silence with Ettridge's daughters there to witness the occasion. Fully-restored examples of this type typically sell for about £320,000 (\$500,000), so this car represents a rewarding restoration project opportunity for a true Aston Martin enthusiast. For details, visit bonhams.com.

WARD'S 10 BEST ENGINES OF 2013

Ward's 10 Best Engines honors have been announced for 2013 cars and light trucks. For the first time in seven years, the list comprises only gasoline-powered engines—no hybrids, all-electrics or diesels. While this might seem counter to the industry's push into alternatives, judging editors see this as evidence of

significant innovation continuing with the internal combustion engine, making it more fuel-efficient than ever, and they expect this for the foreseeable future. Now in its 19th year, Ward's 10 Best Engines recognizes powertrain technologies that are affordable to most, boost power and torque, are highly efficient, sound good and pair up well with their vehicles. *WardsAuto* editors chose the winners after driving 40 vehicles in their routine commutes around metro Detroit for over two months. Each engine was scored on power, technology, observed fuel economy and noise-vibration-harshness. There is no instrumented testing. Each engine must be available in a regular-production US-spec model on sale by first-quarter 2013, with a base price below \$55,000. Winners from 2012 were automatically eligible and evaluated against the new engines for 2013. This year's winners (and vehicles tested) are:

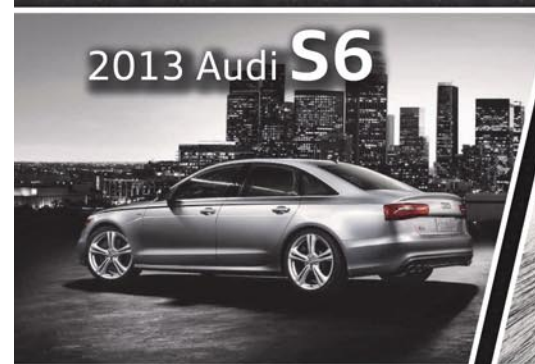
- 3.0L TFSI Supercharged DOHC V6 (Audi S5)
- 2.0L N20 Turbocharged DOHC I-4 (BMW 328i)
- 3.0L N55 Turbocharged DOHC I-6 (BMW 135is coupe)
- 3.6L Pentastar DOHC V6 (Ram 1500)
- 2.0L EcoBoost DOHC I-4 (Ford Focus ST/Taurus)
- 5.8L Supercharged DOHC V8 (Ford Shelby GT500)
- 2.0L Turbocharged DOHC I-4 (Cadillac ATS)
- 2.4L DOHC I-4 (Honda Accord Sport)
- 3.5L SOHC V6 (Honda Accord)
- 2.0L FA DOHC H-4 Boxer (Subaru BRZ) ■

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Taking on the kings

Kia continues to gain on the long-reigning champs in two red-hot segments

by Joe Sage

The economy has been full of mystery lately, with examples of people doing very, very well in some cases, and just the opposite in plenty of others. As explained by Kia Motors America (KMA) executive VP of sales Tom Loveless, we have been seeing positive consumer spending habits... and positive consumer saving habits. And it's unusual to see both at the same time. But, when you think about it, what better time to buy a stylish and well-equipped top-tier economy vehicle? These are the times when "a challenger brand thinks big," says Loveless.

Kia has been thinking big for the past decade, and it shows. We've commented before on the rapid pace with which they have addressed the tastes and demands of the American market, from style and model range, to fit and finish, to amenities. Loveless says the company's

goal since 2009 has, in fact, been to become an industry style leader. There's little question they have been, and the marketplace has responded.

Sales more than doubled in the US from 2008 to 2012, and Kia sold 558,000 units in 2012, an increase of 14.9 percent over the prior year—the manufacturer's 18th consecutive year of US growth, and an all-time record. And the vehicles are selling at quite a clip—last year, Kia had the fastest turn rate in the industry.

Kia's progress comes in the face of long and solid success stories for other sales kings. The brand is cross-shopped against Honda more than any other, with quantifiable Kia gains across the whole lineup. Kia is also quite proud of the fact they are on the third generation of the Forte (starting with Spectra), while the Toyota Corolla has been in its same cycle for that duration.

Two of the hottest vehicles in the lineup—the compact Kia Forte Sedan and the Kia Sorento midsize 7-passenger crossover—have received complete redesigns for 2014. Kia brought them to Arizona so we could take them for a good long drive.

Much of what makes these vehicles so popular is common to both. Start with Peter Schreyer's design language. Continue with safety: all Kias have been IIHS Top Safety Picks since the 2009 Soul. Add the company's contributions to the US economy: Kia Motors Manufacturing Georgia (KMMG) has become that state's largest economic development success story in history (bearing in mind Georgia is home to Turner, CNN, Coca-Cola and more), running three shifts and producing over 300,000 vehicles per year. And Kia quality is quantified, moving rapidly up benchmark scales, almost 20 points in the last two years alone. Yet they still provide the same reassur-

ing 10-year, 100,000-mile warranty they did when the brand first needed to establish itself in the US market. Residual value (after three years) has moved from the 30s to over 50 percent in the past three years. If you like what you see, be confident of a good buy.

2014 Kia Sorento

The original Kia Sorento ran from 2002 through 2009. Model year 2010 brought an all-new model we are all seeing on the road in droves. For 2014, Sorento receives what officially is a mid-cycle freshening and slight facelift—you will immediately recognize the vehicle, if you know the prior one—but some 80 percent of its parts are new or significantly changed. Sorento LX, EX and SX trim levels are also joined by a new Limited (or SXL) model.

The hood, side slabs and roof are the same, but front and rear fascias, grille, bumpers and lighting are redone—including available xenon HID headlights and LED elements in some models' taillights. There are redesigned wheels, and the rear liftgate receives programmable power. All together, it's not enough to disturb the Sorento's growing admiring audience—just enough to help the vehicle flow smoothly into the near future.

Grab an illuminated door handle and step inside, to find evolutions including soft-touch nano-paint and satin chrome surfaces, new YES Essentials stain-resistant seat materials (or available Nappa leather), an upgraded leather steering wheel, and a redone center stack and console—which houses a new shifter that uses a straight-line boot-type design, replacing the old stairstep. Instruments and amenities are now controlled through Kia's UVO eServices—via an 8-inch TFT center display, plus an available 7-inch contextual TFT in the

main cluster—and audio by Infinity once again provides output that sounds as though it could have cost as much as the entire vehicle. Front row seats are heated and ventilated, the second row heated, and the interior benefits from second-row sunshades and a panoramic roof that now has a one-piece power roller blind.

This checklist of features is underpinned by the biggest changes: an all-new platform and engine for 2014. The chassis has enhanced rigidity and improved NVH (noise, vibration, harshness) figures. The platform rework is good for ergonomics, too, as the second row has noticeably increased legroom (and the third row a

little bit, too, in seven-passenger configurations). Boarding and loading are easier and more comfortable, with a 10mm (about 3/8-inch) drop in step height and hip point ground clearance. All this clever packaging translates to more interior volume, too: an additional 1.4 cubic feet with the third row down or an additional

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2014 Kia Sorento



2014 Kia Forte Sedan





half a cubic foot with the third row in place—all with no increase in exterior dimensions.

Suspension is reengineered front and rear, with a new H-shaped subframe in front and reinforced multilink (on AWD models) in the rear, reducing weight, improving driver dynamics and passenger comfort, and increasing straight-line stability—things our drive would confirm.

Motor driven power steering (MDPS) is adjustable to Normal, Sport and Comfort settings. Its quicker ratio (brought to 15.9 from 16.3) delivers a 35.9-foot turning circle—less than a foot more than a MINI and more than a foot less than our admirable utility vehicle benchmark, the Jeep Grand Cherokee. The ride also benefits from wider rims, providing more lateral stiffness and better overall responsiveness.

The prior model's base 2.4-liter engine is dropped. Available for the 2014 model are two: a 2.4L gasoline direct-injected (GDI) Theta II 4-cylinder, and a new 3.3L GDI Lambda V6—which will also be used in the new Kia Cadenza flagship sedan—generating 290 hp and 252 lb-ft of torque. All-wheel drive is a fast-response system with either engine, driver-lockable. Torque vectoring and cornering control contribute to a solid safe feel over a wide range of driving surfaces and conditions.

The 2014 Kia Sorento starts at \$24,200 for the LX with 2.4L four or \$27,500 for the LX with V6. A midgrade EX with V6 starts at about \$30,000 and a top trim SX with V6 has a base price of about \$35,000.

We drove the Sorento second, during our dual-vehicle launch event, following the Forte Sedan. Despite moving from an obviously lower-centered and therefore presumably more sporty-handling format to this taller midsize crossover, we basically didn't find ride or handling lacking, whatsoever. Our drive did not include any off-road time, but our paved highways (see red route on map) included significant curves, hills and the occasional cliff-hanging drop-off. And those fast straight lines. All were handled fine at typical Arizona open highway speeds.

We have been seeing the Sorento on Valley highways two, three and four at a time—and there are many reasons why. If you need this type of vehicle, or even half-need its utility but like the format, the Kia Sorento belongs on the shortest version of your short list.

2014 Kia Forte Sedan

The Kia Forte generation being replaced is just three and a half years old. Given the typical development cycle of a new vehicle, this basically suggests that the new Forte was in the works pretty much as soon as the last one's first copy left the factory floor. "Continuous improvement" is a popular buzzword in business and industry, but this is more evidence that it's a way of life in Korea.

Check out that sexy stance in the lead photo. KMA national manager of product planning Ralph Tjoa tells us it was conceived to evoke the feel of a cheetah, ready to pounce. Or an archer, ready to shoot. In either case, it is intended to convey a feeling of strength, agility and motion. In this new generation, the sedan is picking up a lot of soul from the Forte Koup, without sacrificing four-door interior volume and utility. The Forte sedan was penned by the Kia Design Center America, in Irvine, California—the source of such inspired concepts as the Track'ster, Soul'ster and Cross GT (see Chicago Auto Show in this issue).

Great design is always a worthy goal, but Kia is driven to it by product focus groups, as much as by their own good taste. Customers identified styling and design as prime motivators in their purchase decision. Thus we see strong wheel arches, a longer greenhouse, a trunk that's two inches wider, taillights sporting 81 LEDs, and of course one of the strongest implementations of the brand's "tiger nose" grille.

(Notice how the tiger nose is accomplished in painted sheet metal on the Forte, but is incorporated into the chrome of the grille on the Sorento. It seems to us to be a stronger presence on the Forte. In Chicago, we asked Kia's lead designers whether this was driven by the fact that the hood seam abuts the grille on the Sorento, but not the Forte, or by other considerations. No, they said, it is just a matter of variety for variety's sake.)

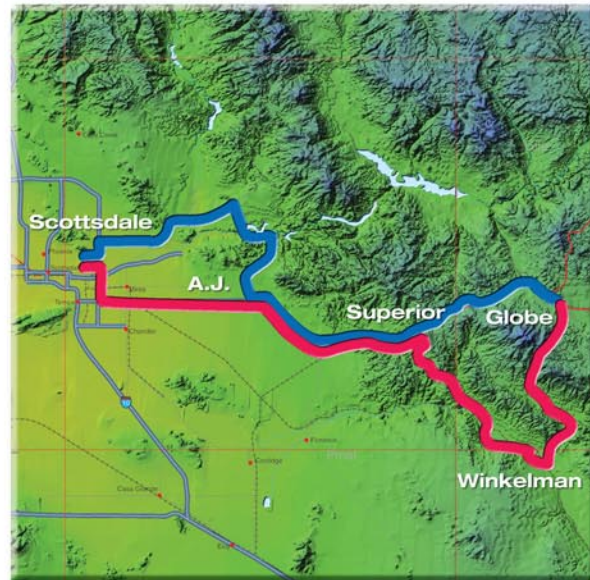
The Forte is likely to be a driver-driven purchase, and it comes with a driver-centric cockpit. The console is distinctly angled in the driver's favor, for an enhanced feeling of control. Friends and family are accommodated as well, with a longer, wider cabin and lower floor, providing more leg, head and shoulder room than the prior generation.

The engines are new. And they are "NU"—Kia's name for a series of smaller and lighter powerplants just entering the product stream. For the Forte, we have a 148-hp 1.8-liter multi-port injection (MPI) in the LX model and a 173-hp 2.0-liter gasoline direct-injection (GDI) in the EX.

The new Forte is reengineered to deliver increases in comfort—new suspension structure with comfortable ride in mind, driver-adjustable steering, and many NVH improvements, from instrument panel isolation to floor insulation, to engine note tuning, to reduction of idle vibration, to additional lightweight foam throughout. The car was already small and light enough to provide a sporty drive with good road feel, and these creature comforts do not detract from it.

Body aerodynamics—from new body panels, to small deflectors in key spots, to new wraparound taillights—reduce drag from a Cd of 0.29 to 0.27, almost matching the Kia Optima Hybrid's benchmark 0.26.

Body stiffness—which provides everything from solid handling to passive safety, to a degree of fuel effi-



ciency—is increased by 37 percent, largely through an increase in the use of high-tensile strengthened steel to 63 percent throughout (which is where fuel-shaving weight savings come into play).

If this sounds like a series of win-win-win propositions, you're right. Technologies and innovations from higher-end models continue to migrate down the lineup. (They also are enabling a migration up, which is where a new flagship Kia Cadenza is about to enter the scene, but that's another story for another day.) As an example of small but welcome touches, the Kia Forte now has ventilated seats, an exclusive in this segment.

Speaking of welcome, as you approach your new Kia Forte, the mirrors and lights will all come to life to welcome you aboard. (Of course you can fine-tune your preferences for all of this, if it doesn't float your boat.)

The base Kia Forte LX with manual transmission (another huge plus, right there) starts under \$16,000. Well-equipped, you can still top out in the mid-\$18s. (Full pricing details will become available in March.) Both the manual and automatic transmissions are 6-speeds.

The Forte EX (with the same 2.0L as the LX) moves to 17-inch wheels and offers comprehensive Premium and Tech Packages, with a base price under \$18,000 and a combined add-on of less than \$3000 even to max out with both of those packages. Expect an SX also, as in the prior lineup, with info to follow.

The Forte was our first drive of the two (see blue route on map). We departed downtown Scottsdale and used familiar shortcuts to duck out through Fountain Hills to the Beeline Highway, taking it north as far as Bush Highway, where a small caravan of Forte sedans with GoPro cams turned heads, snaking past Saguaro Lake and the Salt River at far better than snakelike speeds. From there, we cut down to the eastern reaches of Loop 202 and US 60, heading out through Apache Junction, to the canyons between Superior and Miami-Globe. The cars were great handlers, and we had a chance to sample multiple drivetrains. The 148-hp base LX model has a 6-speed manual standard, with an automatic available, while the EX—at 173 hp—is automatic-only. Now, there is a devil's bargain, as we would always rather have the horsepower, but prefer the manual transmission. But if

you want the power, and have a grand or two more to spend—and prefer the automatic—the choice is easy. If you really like to drive with two hands and three pedals, at least the process is easy, if not the choice: drive the LX and see how you like it. If your shifting style ekes out the grunt you seek from this engine, then you have a win-win: a less expensive car, and a clutch. There are plenty of competing cars whose horsepower falls anywhere in the range of these two, anyway (but may not offer the manual), so the odds lean in your favor.

Either way, you have a vehicle of tremendous fit, finish and value, with a surprisingly spacious back seat and trunk, clean and comfortable ergonomics, and that outstanding Kia warranty.

UVO eServices

Kia's electronics interface is via Microsoft-partnered UVO—"your voice." Early setups had music and phone functions, but customer feedback urged enhanced connectivity with the outside world and more content on "the emotional side." New UVO software adaptations in the 2014 Sorento (and other models, with more on the way) wrap telematic services into the mix—free for 10 years or 100,000 miles, with no contract—using your own smartphone's connectivity. This trend should serve consumers well, as proprietary systems are hard pressed to keep up with the rapid change of everyone's handheld mobile environments. As such, Kia chief technical strategist for the connected car Henry Bzeih tells us that the updated UVO eServices package is "not a challenger but a disrupter of the telematics industry."

Functions expand to include everything from phone, web and real-time mileage-based vehicle maintenance cues, to 911 connect (tied to airbag deployment), roadside assist, even contextual information about just how routine or serious a system warning light may really be—letting you finally know whether you actually need to deal with something right now or not.

With so much outside connectivity, Kia welcomes Google, Apple (including Siri), Pandora and other major partners into the mix—all of which of course offer free downloads and updates.

Kia for 2014 is clearly plugged in. ■





• 2014 Chevrolet Corvette Stingray



• Ford Atlas concept



• Cadillac ELR



• 2014 Audi R8 V8

NAIAS concepts and premieres

We didn't make it to the North American International Auto Show in Detroit this January. Almost. But with it moved a week later, conflicting with the auctions right here at home, we cancelled. That doesn't keep us from presenting some of the highlights:

- The **2014 Chevrolet Corvette Stingray**—Corvette's seventh generation, a.k.a. C7—was without question one of the most anticipated debuts at the Detroit show. With a fierce grille opening, sculpted and vented sides, rectilinear taillamps and a new interpretation of its quad tailpipes, America's own supercar takes a step toward Transformers style and continues to prove it does not shy away from comparisons with Italian supercars. The convertible version was saved for a Chicago reveal.

- The new **2014 Mercedes-Benz CLA** brings the highly influential four-door coupe format of the CLS to a smaller and more affordable size. What makes it a four-door coupe (a term that still spurs debate among some purists) is not just its curved and sloping roofline, but its frameless doors. For a photo, plus information about an upcoming 4MATIC all-wheel-drive version of the CLA, see our Auto News Update on page 12. The all-new 2014 CLA250 arrives in US dealerships this fall, with the 4MATIC version following next spring.

- The **Acura NSX concept** had appeared at the LA Auto Show in November and was shown in Detroit as well. Fans eagerly await an indication of when the mid-engined supercar will go into production and how close it may remain to this concept. Honda calls it "a glimpse at one potential direction for the next-generation NSX."

- Finally everyone can understand the hot-selling Ford Transit Connect's cumbersome name, which comes from it being a logistical feeder, in many field applications, to



the larger **Ford Transit** van in Europe, where both have been on sale for years. Ironically, big truck king Ford brought us the little Transit Connect first, while Nissan, originally known for small trucks, brought us their bigger van first and now is filling out the US lineup with their smaller one (see Chicago show info in this issue). The 2014 Ford Transit comes in high roof (shown at right) and low roof versions, and in panel or window versions. Expect to see plenty of all versions on the road soon.

- The new **MINI Paceman** represents yet another example of this company creating a concept car for the show circuit and then finding it irresistible to put into production. Well, why not. We haven't spent any time riding in the back seat (nor have we visited Home Depot with this as our rig), but we like the styling of its sloped roof, and we're delighted to note that it will be available as an all-wheel-driver. See more info and a photo of the JCW version in Auto News Update on page 13.

- The **2014 Kia Cadenza** represents not only the hot-selling Korean automaker's move into the premium segment in the US, but also their most technologically advanced vehicle to date. Equipment (standard and optional) will include such things as advanced smart cruise control, blind spot detection and lane-departure warning, all things that were the domain of top-dollar luxury models just a couple of years ago. The Cadenza arrives at dealers in the second quarter of this year, with pricing to be announced closer to that time.



• Acura NSX concept



• 2014 Ford Transit High Roof



• Kia Cadenza

- For a look at where Ford's F-Series pickup styling and engineering may be headed, look no farther than the stunning **Ford Atlas concept**. In fact, the more we look at this, the more likely it seems that it will show up on our roads pretty faithful to this design study. We hope so. Besides good looks, the Atlas has a number of breakthrough features. The cargo box integrates tie-downs with the box walls and floor, introduces 110-volt outlets to the bed, and handles loads with an integrated roof rack system and extendable ramps. The interior has lightweight seats for more legroom and "floating" glove-friendly instrument pods. Next-gen EcoBoost® engines introduce auto start-stop—but not while towing. And towing is made easier with dynamic hitch assist for hooking up. Aerodynamic fuel economy elements include active grille shutters, active wheel shutters, drop-down front air dram and power retracting running boards.

- The **2014 Cadillac ELR** extended-range electric car enters production fundamentally unchanged from its original concept car form—which is one of the most striking show cars we've seen for years, even though it was first revealed some four years ago. As a luxury car that incorporates the technologies that have made Chevrolet Volt owners the most loyal of any, we expect this to be a winning combination.

- The **2014 Audi R8** will be available with three different engines: a 5.2-liter V10 with 525 hp, another "V10 Plus" with 550 hp, and now a 4.2-liter V8 with a more humble but still impressive 430 hp. The new R8 sports a newly developed seven-speed S tronic® transmission that helps knock another 0.3 seconds off the 0-to-60 time on an R8 V10 Plus, now hitting 3.3 seconds for that and a top speed of 196 mph. It has also had about 100 pounds knocked off via carbon fiber side blades, front splitter, rear diffuser, spoiler, a smaller fuel tank, manual seats and ceramic brakes. The car will be recognizable by new LED headlights, a hexagonal grille, new mir-

rors and big new round tailpipes. The V8 model hits 60 in 4.2 seconds and has a top speed of 186 mph.

- While Ford's Atlas concept shows great promise, the competition is already on its way to the dealer showroom. The new **2014 GMC Sierra** lineup includes new front-hinged rear doors on extended cab models, for better access in tight spots and no need to disturb the front row. Crew cabs will have a choice of two bed lengths (5'8 and 6'6), regular cabs also two (6'6 or 8'0) and extended cabs just one size (6'6). Interiors and instrumentation are significantly upgraded, and there will be three EcoTec3 engines: a 4.3L V6, and 5.3L and 6.2L V8s.

- The tendency for car models to grow in size (along with price, complexity and features) is nothing new. As BMW's 3 Series has grown, approaching the size of the 5 Series a decade or two earlier, the company has decided to redesignate the former 3 Series coupe as a new Series: enter the **BMW 4 Series Coupe concept**. Contrast this move with Mercedes-Benz, who has been consolidating some designations (e.g. the E-Class Coupe replacing the CLK). Or with Audi, who has introduced an A5 between the A4 and A6, and an A7 between the A7 and A8, as new lineups. But for BMW, the coupe—and then the convertible about the same time—will for now vacate the 3 Series space. Henceforth, a 3 Series will be a sedan and a 4 Series will be a coupe or convertible.

- The **Volkswagen CrossBlue concept** introduces an anticipated new generation of SUVs, with the seven-passenger capacity of a minivan, combined with the efficiency of a plug-in hybrid system comprising a TDI clean diesel, two electric motors, a dual-clutch transmission and "propshaft by wire," an all-electric all-wheel-drive system that coordinates front and rear electric motors. Volkswagen estimates this will all add up to a rating of some 89 MPGe (fuel economy equivalent). Operating in pure diesel mode, expect 35 MPG, still good for a seven-passenger SUV. The CrossBlue can also run in zero emissions mode as a pure electric. ■



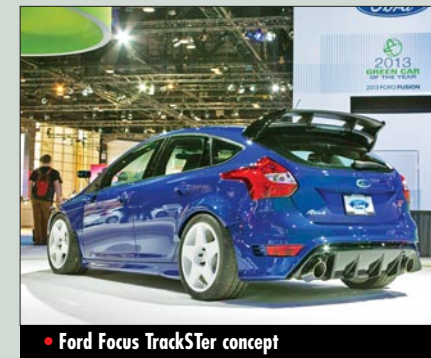
• 2014 Nissan GT-R Track Edition



• 2014 Toyota Tundra CrewMax



• 2014 Jaguar F-Type



• Ford Focus TrackSTER concept

Chicago concepts and premieres

This is the first year we have gone to the Chicago Auto Show. As noted in the prior piece, the Detroit show (North American International Auto Show) moved to a later date this year, conflicting with the Arizona auctions. So we let the dust settle on those and did this instead. It's a different show in some ways. The venue—McCormick Place, the largest convention center in North America—is a beauty. And there's a little more elbow room and conversation than at Detroit.

Nissan had a significant presence at this show, including development in their commercial line and several performance iterations including two from NISMO.

- A **2014 Nissan GT-R Track Edition** takes this famously near-perfect supercar and finds ways to enhance it—specifically for track use. The enhancements include suspension developed at the Nürburgring by Toshio Suzuki, removal of the rear seats, a front spoiler with carbon fiber cooling ducts and brake cooling air guides. This slimmed down powerhouse goes on sale in May.

- Nissan's NISMO motorsports group brought two hot cars to the Chicago stand: a **2014 Nissan Juke NISMO** and a **2014 Nissan 370Z NISMO**, both recognizable by their white paint jobs with red stripes and grey highlights. The 370Z NISMO carries forward its 350-hp 3.7-liter V6, close-ratio 6-speed manual transmission, sport-tuned suspension and brakes and 19-inch forged aluminum-alloy wheels. The Juke NISMO is a complete reworking of this quirky car, with a 197-hp 1.6-liter turbo and body work that improves downforce by 37 percent. The Juke has a reworked interior with bolstered seats. Watch for both this summer.

- As Ford introduced their new big commercial van in Detroit (see prior item), a few years after bringing its



smaller sibling to the States, Nissan did things in the other order. Their big NV Cargo Van—1500, 2500 HD and 3500 HD, along with a passenger version—was introduced as a 2012 model and is now joined by the **2013 Nissan NV200 Compact Cargo Van**, a panel version of the same vehicle that's becoming New York City's new standard taxi. Starting under \$20,000, getting 24 MPG combined, and sporting 122.7 cu.ft. of interior volume, with two sliding side doors, these should sell very well.

- The **Chevrolet "Turbo" Camaro Coupe** is purely a Hollywood promotional item, but it's a beauty. Impractical on many levels—visibility front or rear, for example—this show car has a supercharged 400-hp V8 with a classic huge blower. "Turbo" is a DreamWorks movie due out in July, about—speaking of impractical—a snail who dreams of winning the Indy 500. This Camaro is all show, but it's fun—and easy—to visualize the go.

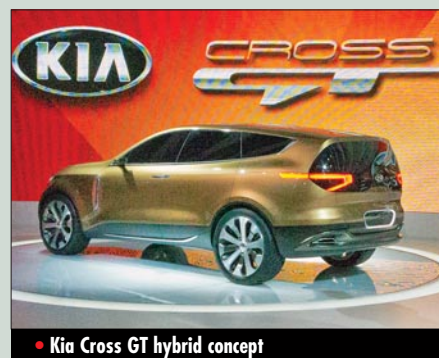
- Blending style elements of a grand touring coupe—especially the Kia GT concept car from 2011—with the cargo and utility elements of a crossover, the four-passenger **Kia Cross GT concept** drew a huge crowd on the strength of its style and features. The earlier rear-wheel-drive GT was a German design, but the Cross GT was penned at the Kia Design Center America, in Southern California. The Cross GT is a hybrid, with a 3.8-liter V6, parallel electric motor, 8-speed automatic and torque-vectoring all-wheel drive, producing 400 hp and 500 lb-ft of torque. Its all-electric range is 20 miles.



• 2014 Nissan Juke NISMO



• Chevrolet "Turbo" Camaro Coupe show car



• Kia Cross GT hybrid concept

- The **2014 Toyota Tundra** has been completely redesigned, while maintaining a style that's instantly recognizable. Sharper and even beefier, the new lineup was engineered in Michigan and styled by Caltly Design Research in Newport Beach. Interiors are all new, with more differentiation between grades. Three engines are a 4.0L V6, 4.6L V8 and 381-hp 5.7L i-Force V8. Electronic features such as blind spot monitor and cross traffic alert will be available on the new Tundra, useful in a big vehicle. Regular, double and CrewMax cabs are available, all in two- or four-wheel drive.

- Jaguar Land Rover North America president Andy Goss kicked off the Chicago show with a thorough product overview. One highly anticipated highlight was the all-new **2014 Jaguar F-TYPE**, first revealed last fall at the 2012 Paris Motor Show. This front-engine, rear-drive two-seat sports car returns to the brand's dearest roots and will come in 340-hp and 380-hp supercharged V6 versions, plus a 495-hp supercharged V8 version, ranging in base price from \$69,000 to \$92,000. As light as 3521 pounds, the F-TYPE is built with fourth-generation Jaguar aluminum architecture. Acceleration times vary by engine from 4.2 to 5.1 seconds, and the convertible top can be retracted in just 12 seconds at up to 30 mph. The F-TYPE arrives at dealers in the US this summer.

- The **Ford Focus TrackSTER concept** is an effort by Project ST—Ford Racing, Ken Block and LA tuning outfit fifteen52 working together—and is the first of three Focus ST builds geared toward hardcore performance. The Ford Racing short-throw shifter and performance exhaust system used in the TrackSTER will be available to all Focus ST enthusiasts. Other Ford Racing parts include a Mountune engine build with forged rods and pistons, performance intercooler and upgraded ECU; Quaife limited-slip differential from Focus ST-R; Centerforce custom clutch; four-piston front discs by StopTech; and fender flares from the Chinese Touring Car Championship Focus.

- The new **Mopar '13 SRT Viper** was on display in a 1000-plus-square-foot Mopar Garage, an elite selection of more than 300 Mopar parts and accessories made specifically for the SRT Viper, Dodge Dart and Fiat 500. Other "Moparized" vehicles on display included a Jeep Wrangler, Chrysler Town & Country and Ram truck. New Mopar-first features include smartphone vehicle-info apps, electronic owner's manuals including complete kits in Spanish, the ability to make a vehicle a WiFi hot spot, in-vehicle portable device wireless charging, WiTECH vehicle diagnosis and software updates and more.

- Chevrolet reenters the diesel car market with the **2014 Chevrolet Cruze 2.0TD Clean Turbo Diesel**, the cleanest diesel passenger car GM has ever produced—generating less than 10 percent the NOx and particulates of previous-gen GM diesels. GM testing at launch estimates best-in-segment range and 42 MPG highway mileage from an approximately 148-hp and 258 lb-ft engine (EPA testing will follow). The car's 0-to-60 acceleration is estimated at 8.6 seconds, competitive with popular German diesel cars that dominate the US market. Starting price will be \$25,695, with a six-speed automatic, four-wheel ABS discs, 17-inch alloy wheels, rear spoiler and leather-appointed seating.

- Four decades after the original—a 3500-unit limited edition in 1973 called GSR (for Gelb Schwarzer Renner or "Yellow Black Racer")—meet the **2014 Volkswagen Beetle GSR**. Based on the original, the new Beetle GSR has a yellow body with matte black hood, decklid and bumpers, black rocker panel stripes and a rear spoiler. The GSR has 19-inch alloy wheels and silver brake calipers and debuts an upgraded 210-hp four-cylinder turbo (also coming to the Jetta GLI and Beetle Turbo during the 2013 model year). The new Beetle GSR has an upgraded yellow and black interior with sport seats, yellow stitching, leather sport steering wheel, R-Line dash pad, GSR shift lever and more. As with the original, the new Beetle GSR will be limited to 3500 units. ■



• Mopar '13 SRT Viper



• Chevrolet Cruze 2.0TD Diesel



• 2014 Volkswagen Beetle GSR

Fine for the forest, desert or ...track!

Counterintuitive or not, the company behind the hot tuner fave WRX STI shows off their potent turbocharged version of this popular midsize utility.

By Joe Sage

Subaru introduced the compact crossover Forester in the late 1990s (1997 in Japan, 1998 in the US), pitting it against the biggest of the big SUVs that roamed our roads at that time. The same buyers who valued Subaru as a source for non-nonsense, high-mileage, all-conditions-capable wagons and sedans found much to like in this small but useful machine—what Subaru calls “SUV tough but car easy,” and considered by them to be the first crossover (though other brands consider themselves the same). Sales grew from about 15,000 the first year to about 60,000 by 2002.

Sales of the second generation, from 2003-2007, tapered off and ultimately dipped to 45,000.

In its third generation, the Forester was bumped up a bit in size, while other utilities started to migrate down. This model contributed to very good years for Subaru, which has had five years of growth, four years of record sales, and a record 336,000 units sold in 2012. Directly applicable to Arizona, Subaru’s market share in sunbelt states increased almost 20 percent over that span.

Subaru leads the industry for brand loyalty, with a 71 percent customer retention rate. And their drawing power continues to grow: 60 percent of last year’s customers were new to the brand.

We headed to Tucson, to see what was new for the coming year: the fourth-generation 2014 Subaru Forester.

GETTING TO THIS POINT

Following the best-selling third generation of the Forester, Subaru has been motivated to make the vehicle even better for 2014. The mission assigned to the development team was comprehensive: the new Forester must exceed at safety standards and must do well off-road, on-road, climbing and descending, and on the track—all of the above in dirt, deep water, snow, ice or slush.

Customers rate the Forester high for adventure, versatility, longevity (expecting as much as 300,000 miles from their vehicle) and safety. For 2014, Subaru seeks to deliver more styling presence and better packaging, more daily usability on highways and around town, better fuel economy, improved environmental impact, more ease of use and general enjoyment, and a higher level of differentiation specifically for the turbo—now becoming a separate performance model, not just an engine option. Lest you think this might run up the cost, the team was also told to deliver the best value SUV in its class.

GETTING TO THE NEXT POINT

To help fulfill these duties, the 2014 Forester receives a new CVT (continuously variable transmission)—standard on two top 2.5i models and both 2.0XT models, though optional against a 6-speed manual on two lower 2.5i models. And it gets a new 2.0-liter high-torque turbocharged engine for the 2.0XT model. Subaru emphasizes that the new turbo is a dramatically reengineered model, “not a bolt-on power unit.” The turbo model can

KEEP RIGHT >>



Photo: Inde Motorsports Ranch

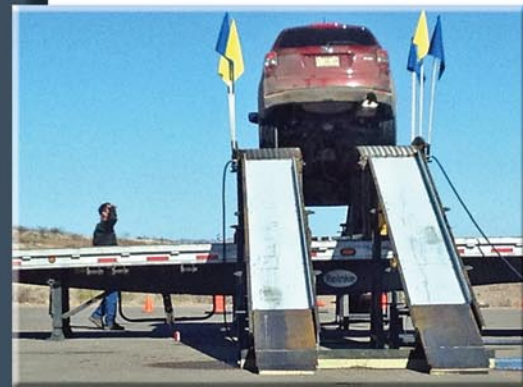


The 250-hp 2.0XT turbocharged engine above powered us for hot laps at Inde Motorsports Ranch, a 2.75-mile, 21-turn private racetrack outside Willcox. The boxer engine’s low profile contributes to superb high-speed handling. The 170-hp normally-aspirated 2.5i boxer (below) was no slouch, either, burning up the gravel on North Cascabal Road from Pomerene north to San Manuel, Arizona.





Dominick Infante, national manager of product communications, demonstrates how the new 2014 Subaru Forester can gobble up cargo, whether it be a palette-load of yoga mats or an ungainly antique wagon wheel. The attractive and well-arranged cockpit of the Forester is a great place to challenge the CVT-paired Active AWD system with Hill Descent Control and X-Mode braking control, in the attention-focusing conditions seen below. At bottom, Subaru's engineering and development team from Japan join us near Redfield Canyon, on the road between Pomerene and San Manuel, to see the fruits of their efforts, under power on gravel.



be visually distinguished by front and rear fascias (but no hood scoop), 18-inch wheels, and upgraded headlamps and exhaust. The turbo also sports upgraded brakes and SI Drive control with Intelligent, Sport and Sport# ("Sport Sharp") settings, operated by steering wheel controls.

Both engines retain the Subaru (and Porsche) standard: an opposing-cylinder boxer format, low and stable.

The Forester has grown again: the wheelbase is an inch longer, and overall the vehicle adds an inch and a half. It's half an inch wider and 1.4 inches taller. Its overall profile is similar to that of its predecessor—you won't have any trouble recognizing the vehicle—but aerodynamics are enhanced, creating slightly more of a teardrop shape (and an 11 percent improvement in Cd, which they state beats RAV4, CR-V and CX-5 while maintaining SUV style and cargo volume).

The increased dimensions add elbow and visual room inside: occupants are farther apart and sit up higher. The instrument panel moves some functions into an upper area, attractive and with an intuitive operating flow.

Rear seating is particularly improved, with the console moved forward almost four inches, the driveshaft tunnel dropped 2.6 inches, almost an inch of foot room added below the front seats, and front seatbacks scalloped to create more rear legroom. Rear door angles and anti-slip doorsills—as well as improved child seat tethers—make the Forester more kid-friendly than ever. New cupholders are round instead of square (Subaru laughs at this overdue breakthrough), with ones in back that a kid in a child seat can reach.

Mom and dad benefit, too, as the A-pillar base is moved a full eight inches forward (with side mirrors moved to the doors), the front doors are five inches wider, and the door sill is an inch closer to the ground, all improving ingress and egress.

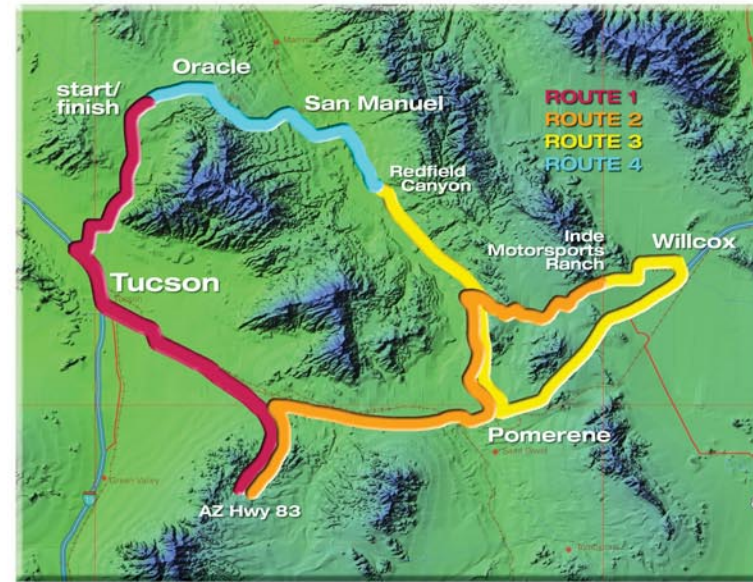
None of this new passenger space is at the expense of utility: cargo volume is also up by nine percent. The cargo area is now accessible by power liftgate, with its control in the strut, not in a fat D-pillar, also maximizing space. The power liftgate also has memory positions, so you can set a height that would work for Martina McBride. Manual efforts can override the power any time you prefer, such as for a quick close in a downpour.

THE FULL PACKAGE

Subaru's VDC (Vehicle Dynamics Control) electronic stability system enhances familiar hands-on driver duties, controlling all-wheel-drive steering, yaw and transverse power split for better traction and faster adaptation in low friction situations and in curves.

The combination of Subaru's CVT, which is installed in the majority of new Foresters, with VDC and braking systems, provides the foundation for an X-Mode system. X-Mode, "with one flick of the switch," lets you descend extremely steep grades at slow speeds. You concentrate on your path and steering, while the Forester lowers your gears, fine-feathers the accelerator and handles the brakes—all specific to the type of surface you are tackling, including extra slippery or high-friction gravel. We gave X-Mode a maximized test on an artificial surface (see photos), pushing the limits of steepness. An 8.7-inch ground clearance enhances these capabilities.

Subaru's EyeSight® Driver Assist system of pre-collision, lane departure, adaptive cruise and other features



migrates this year to Forester, from Legacy and Outback (see our Legacy review, also in this issue).

All those challenging maneuvers are things that not every owner does every day, so to enhance regular life, Subaru has added a new multi-function color display, which controls a Harman Kardon 440-watt 8-speaker premium audio system with metal cone speakers, including 6x9 front door woofers (there is no subwoofer, to maintain maximum utility space). Phone and infotainment functions utilize your existing smartphone, so you can continue a conversation as you leave your Forester.

The Forester's enhanced efficiencies, despite its larger size—all of which actually only adds 24 pounds—add up to class-leading fuel economy. The highest numbers are delivered by the naturally-aspirated 2.5i engine with CVT (see sidebar), which beats all challengers with AWD (though a front-drive Ford Escape or front-drive Mazda CX-5 challenge a couple of specifics, e.g. the CX-5 has a higher city mileage but via a half-liter smaller engine).

Green credentials come from these fuel mileage ratings, from PZEV emissions ratings, and from Subaru's proud achievement of a zero-landfill assembly plant.

The Forester is quicker this year, with 0-to-60 acceleration of about 9 seconds in the 2.5i, which beats the old model and most competition. The 2.0XT turbo hits 60 in 6.2 seconds (a V6 Porsche Cayenne does 6.1), while getting 28 MPG highway. Electric power steering

helps fuel economy and didn't interfere with our driving enjoyment. Four-wheel disc brakes are retuned and enhanced. Suspension has the same layout as in the past but with a rebound spring brought over from the Impreza, for faster cornering and quicker turn-in. The rear subframe is stronger—even moreso on the 2.0XT turbo model—as are the upper A-arms, for better ride and handling. Stiffened suspension mounts and rear liftgate opening contribute to improved NVH (noise, vibration, harshness) figures and an overall body rigidity 50 percent higher than in the previous Forester.

YOUR NEW FORESTER

Subaru expects the second-from-base 2.5i Premium model to account for 45 percent of Forester sales, with the turbo accounting for 5 percent. It's a price-conscious brand, and it's a fuel economy-conscious brand. We did have as much fun driving the 2.5i at speed, on gravel, from Pomerene up to San Manuel, as we did driving the 2.0XT at higher speed on the racetrack at Inde Motorsports Ranch—each in its own particular way.

You do owe it to yourself to drive the turbo before you buy. After all, its starting price (see sidebar) is lower than the highest 2.5i price, and fuel economy ultimately depends upon your own driving style—which, if you are intrigued by the idea of the turbo, just might be a little heavy-footed on the 2.5i's pedal, anyway. ■

The Subaru Forester 2.0XT turbo at the front of the line (above) is quickly distinguishable from its 2.5i sibling (second in line) by prominent air intakes in the lower front fascia.

2014 SUBARU FORESTER

2.5i : base, Premium, Limited, Touring

HP / TORQUE170 hp / 174 lb-ft

TRANSMISSION¹6-speed

MPG (EST)¹22/29/24 (city/hwy/comb)

AWD¹: Continuous with viscous-coupling locking center diff, split 50:50 front/rear.

TRANSMISSION²CVT

MPG (EST)²24/32/27 (city/hwy/comb)

AWD²: Active Torque Split AWD with electronically managed continuously variable transfer clutch managing power split based on accel, decel, traction.

BASE PRICE\$21,995-29,995

2.0XT : Premium, Touring

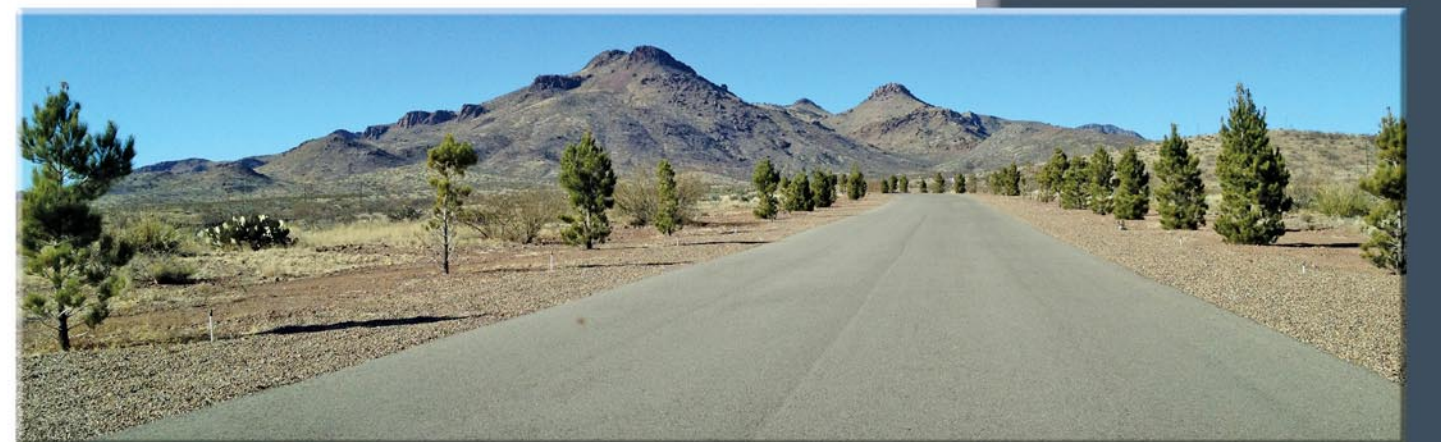
HP / TORQUE170 hp / 174 lb-ft

TRANSMISSION²All have CVT

AWD²: Active Torque Split as above.

MPG (EST)23/28/25 (city/hwy/comb)

BASE PRICE\$27,995-32,995



INSTANT COLLECTIBLE

INFINITI'S NEW 7-PASSENGER MIDSIZE LUXURY CROSSOVER ALREADY SET TO BE RENAMED WITH REST OF LINEUP

BY JOE SAGE



Despite being an all-new 2013 model, the Infiniti JX35 midsize luxury SUV has been around for about a year already, introduced in spring 2012. So maybe that mitigates the fact that no sooner did the JX arrive, than Infiniti announced a renaming of its entire lineup. All the cars will be Q-something, and all the utilities will be QX-something.

The JX35 will become the QX60, lower-mid-pack in a range from 50 to 80, nosing its way between the obviously close siblings EX and FX, which will become the QX50 and QX70, while the existing QX56 moves up the mathematical chain to become a QX80.

These will be effective with Infiniti's 2014 model lineup, which could theoretically arrive any time now, so the JX name could end up with either as much as two years' final lifespan, or just about none at all, depending how you look at it. It's definitely the designation for the 2013 model year. So buy yours today, and let's see what it's worth at Barrett-Jackson in ten years.

But none of that is supposed to be the big news.

THE ALL-NEW INFINITI JX35

The significant thing is that this is Infiniti's first seven-passenger, three-row, midsize model.

Boasting 265 horsepower (and 248 lb-ft of torque) delivered through a continuously variable transmission (CVT) from its 3.5-liter V6, the new JX35 can handle a large family and friends and/or a healthy volume of cargo, all with the handling benefits of a midsize chassis, while delivering a reasonable 18/24/21 MPG (city/highway/combined).

All this comes embedded in a high-tech, luxury foundation, as well. Driving features include Infiniti's trademark engine and transmission mapping modes for Sport, Snow, Eco or Standard conditions, plus electronic handling embellishments including 4-wheel ABS, brake assist, brake force distribution, and vehicle dynamic and traction control systems.

Occupant technology includes an intelligent key with push-button ignition, a standard 7-inch display, Bluetooth hands-free phone, 6-speaker audio, USB connections and auxiliary inputs in the console. That's a good basis, but upgrades are also reasonable (see specs at the end): our test vehicle added four packages containing pretty much anything you can think of—for example upgrading the audio to one Bose system in a Premium Package, then further in a Deluxe Touring Package. The base price, a hair over \$40,000, is very reasonable for a luxury vehicle with this capacity. Compared to option package pricing in some other high-end brands, a grand total of \$54,000 with all these inclusions is still a bargain, for this level of luxe.

The standard interior needs little else (although one package added maple accents, heated seats and moonroof to ours). Infiniti does its usual job of combining more materials and colors than average—multiple leathers, elegantly shaped brushed aluminum fixtures and renewable exotic woods—to present a rich tapestry of look and feel. The JX has triple-zone automatic temperature control, a sliding moonroof over the front seats (ours adds another with the Deluxe Touring Package), 8-way driver and 6-way front passenger power seats, second- and third-row heat vents under first- and second-row seats, power liftgate, and even sequential welcome lighting. All of that should make it clear to you that you have arrived.

A WEEK WITH THE NEW JX35

We actually had a brief drive in this vehicle a couple of months earlier, at the Active Lifestyle Vehicle Awards event in Chandler, where it was a finalist in the Luxury On-Road category—for vehicles with base price of \$35,000 or more, designed primarily for driving on pavement—the most crowded of all categories. (The winner in this segment was the Audi allroad, which is a decidedly different type of vehicle.) We noted several things at that time: the vehicle's very favorable CVT (a feature some people debate in other vehicles), its nearly invisibly smooth starts and stops, the exquisitely well executed sculptural door handles and other such details, and its superb (and tight) handling on an impromptu parking lot autocross course.

All this was borne out in our full week. This time, we tried out the double-upgraded Bose 15-speaker audio system, which was very strong once we fine-tuned it.

As usual, we could live without a driver's seat that relocates while parked and takes you for a ride upon entry.

The JX ran our tight maneuver tests well, despite having a 38.7-foot turning circle. It felt (and fit) more like 36. It's not a sports performance driver at 265 horses and 4280 pounds, but it's a very spry utility driver.

In terms of the Infiniti four-SUV pecking order, in which this is numbered as the second-smallest overall (though not by seating), the JX seemed plenty big. As the to-be QX60, the JX is bracketed between the two-row EX and FX (which will become the QX50 and QX70).

The other three-row SUV in the lineup, the current QX56 (to become the QX80) is huge. With a relatively narrow cabin and "personal aircraft" feel, the QX56 doesn't necessarily feel as big as it is, behind the wheel, but it's still a handful to park and to handle. Enter the JX. As the trend continues to downsizing of everything, we would guess this is a better resale investment, and it will please you more on a daily basis. (But if you need the big QX56, well, it's because you know you need it.)

To us, the JX35 (QX60) comes across as just right. ■

OUR TEST 2013 INFINITI JX35 FWD

Base price.....	\$40,450
Roof rails.....	370
Technology Package: heated steering wheel, remote start, brake assist, forward and backup collision warnings/intervention, blind spot warning/intervention, lane departure warning/prevention, intelligent cruise control, distance control assist.....	3,100
Theater Package: dual 7-inch monitors w/wireless headphones and remote, headphone jacks and volume, aux input, 120v power outlet.....	1,700
Deluxe Touring Package: 20-inch wheels, 15-speaker Bose audio upgrade, advanced climate, heated/cooled front seats, heated second row, rain-sense wipers, moonroof and power sunshade over second and third rows, maple accents.....	3,550
Premium Package: hard drive nav, Infiniti Connection™, 6-inch touchscreen, voice recognition, traffic, weather and restaurant info, Around View® system, Bose audio system (replaced with Deluxe Touring Package), streaming Bluetooth audio, driver two-way lumbar support, intelligent key.....	4,950
Destination.....	950
TOTAL.....	\$54,070



Ready for anything

Story and photos by Joe Sage



Leaving the comfort of the Valley in midwinter is a debatable idea. But our Audi A5 quattro was scheduled for the holiday season, and we mentioned that we might take it and head north. So Audi was thoughtful enough to pull off the all-wheel-drive coupe's standard all-season tires (the Premium Plus model's already upgraded 19-inchers) and install some full-blown mud and snows: specifically Dunlop SP Winter Sport 3D Extra Load M+S in 255/35 R19 size with a V speed rating (149 mph). If these don't say "bring it on," we don't know what does.

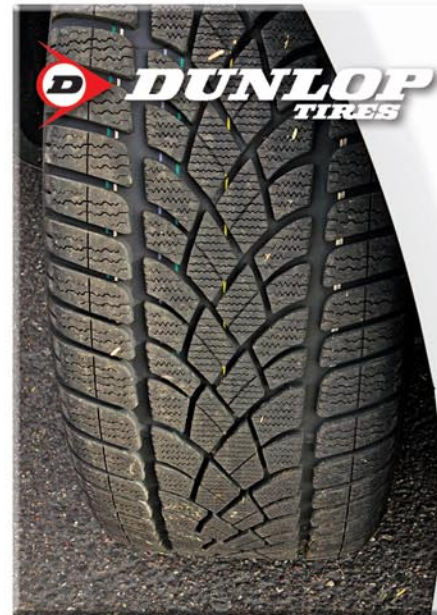
We had tentatively considered giving this combination about an 1800-mile run, through northern Arizona, up through the Navajo Nation and Monument Valley, through Utah's red rock canyon country, then into north-west Colorado—probably four days of driving and two days of being there, if we did it in good weather. (The car arrived with 1735 miles on the odo, so if we were to take this trip, we'd be about doubling that.)

The paradox was a familiar one: we wanted bad weather—perfect for testing the Audi's quattro magic—but big winter storms would likely make the trip take even more time than we had available. With one eye on the forecast, we might have a couple of days to decide.

Cabin fever

The driver-centric cockpit of an A5 is standard top-notch Audi. Heated seat controls are a simple one-touch for full-blast, with two lower settings from there—perfect for our intended winter adventure. Synchronization of climate for driver and passenger still requires going deep into the menu, but the system includes pollen and pollutant filters, as well as separate vents for any rear seat passengers (it'd be a tight fit for those). The 12-way power sport seats took some adjusting, but that is then saved in the key's memory, and they also have four-way power lumbar support. Our car lacked keyless entry and start, included on the top Prestige trim level but optional (for \$550) on this middle Premium Plus model.

Our Premium Plus stickers at almost four grand more than the base Premium model. Prestige would add about six grand more to that. Some elements of those differ-



entials can be added incrementally as individual options; some not. One thing we would upgrade is the audio (our car did have a \$3050 MMI/nav system that included audio, okay but nothing special). Audi has moved from Bose to Bang & Olufsen for their upper-end systems, and a 12-speaker 505-watt B&O system is available for just \$850 (with or without the pricier nav basis).

The power of four

As fate would have it, we got into the Audi A5 straight out of a rally drive in an Audi S5—a first-year V8 with 354 hp. The differences are not surprising, really, but you are aware of them because the layout feels exactly the same behind the wheel. The A5 with its inline-4 is lighter and feels quicker, or at least a different kind of quick, while serving up the surge of a turbo, without the growl of the V8. (A current S5 has a supercharged V6 with 333 hp.) The A5's 211-hp two-liter turbo has a light growl similar to the Audi allroad (see our Nov/Dec 2012 issue). That had sounded a little strained at times in the allroad, but in this implementation it does not.

A light feeling in the steering might be attributable to this smaller four-cylinder engine, but probably more so to its electromechanical power system. Those can feel detached, as well, but this one felt connected.

We felt no turbo lag in the north valley (1700 feet or so elevation) and wondered whether we would notice any at altitude. We didn't want these snow tires going to waste, so we figured there was a very good chance we'd see some altitude, whether it be Colorado or simply a dash to Payson or Prescott. To jump ahead in our story, the answer is no: we never even really thought about the possibility of turbo lag again.

Ultimately, we scratched the 1800-mile Colorado holiday road trip idea. But we had been keeping an eye on the weather apps, and by December 24, a decent winter storm was due to hit northern Arizona. Hot dog. This put an icy road adventure within range, despite heavy holiday traffic, so we prepared to head north to Flagstaff, where it was supposed to snow all afternoon.



2013 AUDI A5 2.0T

ENGINE	2.0L inline-4 turbo
HP	211
LB-FT	258
DRIVETRAIN	quattro all-wheel drive
TRANSMISSION	6-speed manual
WEIGHT	3681 lb
MPG (EST)	22/32/26 (city/hwy/comb)
FUEL TANK	16.1 gallons
FUEL	premium unleaded gasoline

BASE PRICE\$37,850

A5 PREMIUM PLUS MODEL: auto-dim heated mirrors, iPod interface, Bluetooth® phone prep, heated front seats w/ driver memory, garage door opener, xenon lighting w/ LED DRL and taillights.....\$3,550

AUDI MMI NAVIGATION PLUS PACKAGE: CD/DVD player, HD radio, nav w/ voice-control, color info display, parking system and rear camera, Audi connect/online, Bluetooth® streaming audio.....\$3,050

19" 10-SPOKE WHEELS\$800

SPORT PACKAGE: Front sport seats w/ 4-way power lumbar, sport suspension\$750

POLISHED EXHAUST TIPS\$140

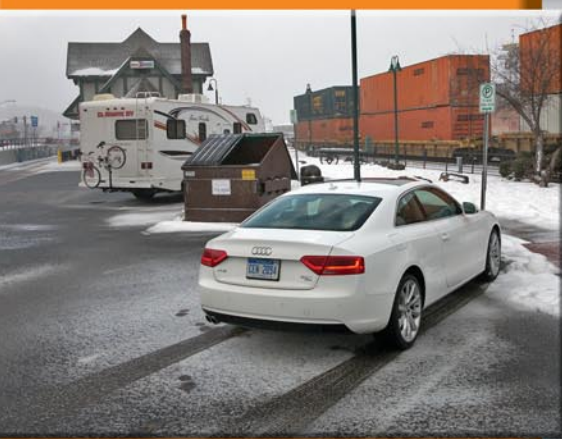
DESTINATION\$895

TOTAL\$47,035

TIRESDunlop SP Winter Sport 3D 255/35 R19 96V Extra Load M+S

Developed for sports cars, coupes and sedans with factory-equipped low-profile tires on large diameter alloy wheels. Dunlop's reactive silica mixing process—with directional tread to avoid hydroplaning, and three different types of high-density sipes to maintain traction on wet and slush-covered roads—enables the tread compound to provide high elasticity at low temps for dependable grip on dry, wet and snow-covered roads in winter conditions. Structure includes twin steel belts reinforced by Dunlop's Joint-Less Band (JLB) of nylon to optimize contact patch and minimize tire growth at high speed.

MSRP \$383 x4.....\$1532



Weather? Ha.

On Monday, December 24, as crazed holiday shoppers jammed the streets, freeways and parking lots with last-minute missions of joy, we hit I-17 north out of Phoenix. By the time we reached Bloody Basin, we were starting to get what we had set out for: bad weather, at least a lot of wet. This stretch came with its own dose of bad traffic: not fast, just crazy. We were at about 3000 feet elevation and climbing steeply (where highway signs warn to "have A/C off to not overheat" in summer). The A5 had all the power we could want, as we climbed. The turbo in motion had all the reserve power on tap we could need. We were not even wishing for that V8 we had just swapped from.

In the early days of the Bridgestone Winter Driving School in Colorado, their slogan said something like, "it's snowing, cold, slippery, and visibility is horrible... a great day for a drive!" This was our mission this day—to find weather bad enough to fully challenge our Dunlop snows. The outside temp dropped to 41 degrees, then rose to 48, as we got within about 25 miles of Munds Park. We had already done well in all sorts of other wet conditions, but were still in search of a snowstorm.

By Schnebley Hill Road, the surface was getting worse, with lots of slush and an outdoor temperature reading of exactly 32 degrees—exactly the worst possible temperature, where the white stuff is part frozen and part liquid. This is the goop that can grab your tires and pull you wherever it wishes, but the Audi A5 quattro with our Dunlop mud and snows was tracking just fine. And this was good, as by that point we were sharing the road with a wide mix of license plates from all over, with people driving every possible speed on their Christmas Eve home stretch. We needed instant response, maneuverability and grip, to stay out of blind spots at least as well as we would in good conditions, and the car delivered.

Next after the run of slush, we found ourselves with left wheels on black—could be pavement, could be ice, even moment to moment—and right wheels on white, now definitely fully frozen, putting the electronic stability and quattro all-wheel-drive systems to the test.

We expect any Audi quattro to come through on all sorts of surfaces, but sportier models like the A5, with bigger wheels, wider tires, lower stance and higher torque can stretch the limits. Not a problem. The A5's suspension is snug and delivers a driver's feel.

In Flagstaff, we had slush and snow, along with fellow travelers of every skill level to dodge. South of Flag, the weather was picking up again, and we departed the Interstate for a variety of ranch and park roads. We got the Audi axle-deep out here, but never bogged down.

The Dunlops were a pretty significant investment for just one afternoon and evening of serious driving, but test duration aside, they were a wise investment.

Most people in urban Arizona would first think of either performance or all-weather tires. But if you have regular trips into serious winter weather, real mud and snows are still the way to go. The Dunlops did well on dry pavement—on I-17 in high-speed downhill stretches, we could hear and feel a little effect of the snows, but very little. As we crossed back down into Maricopa County, the pavement changed and any tire noise went silent. We had a stretch of concrete, and could hear that, then passed back onto silent asphalt, then noisy asphalt. We suspect we've gotten used to rubberized asphalt in the Valley, regardless of tire type. On balance, you wouldn't forgo these if you have real snow driving to do.

We took the Audi A5 on a trip with a serious mix of conditions. We asked ourselves what we might prefer to drive instead. You could have more ground clearance, but we didn't need it. This was lacking back doors, which we didn't need. It was lacking an automatic transmission, the lack of which was our favorite part of all, although that is available. It was lacking summer tires, very much on purpose, which would have been a bad idea on this trip. So yes, ultimately our A5 lacked nothing. And proved itself ready for anything. ■



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Losing that spare tire*

Highly reengineered RAV4 gains space inside, clean lines outside and new handling technologies

*(no worries: it's still included, but now stashed inside)

By Joe Sage



The new 2013 Toyota RAV4 represents the fourth generation of this vehicle. The first was in 1995, which Toyota describes as “the world’s first cross-over SUV” (a claim made by multiple manufacturers, as it was a new term that came into use over time, now often used retroactively). Since then, 1.7 million RAV4s have been sold, and an impressive 88 percent are still on the road. Some 45 or so vehicles have now entered the CUV category, ensuring that it is highly competitive.

Toyota has embarked on a brand-wide refreshing project, with the goal of delivering “more emotionally engaging products,” per an edict by Akio Toyoda, president and CEO of Toyota in Japan. (It was first borne out in the new Avalon introduced recently—see our January/February 2013 issue.) Toward this end, the new RAV4 project was brought to Toyota’s Caltex Design Research studio in Southern California for development.

As you can tell by our headline, some of the results are immediately apparent. Whereas eliminating the external spare tire may seem to be something others have long since done, it is a welcome move. You’ll be glad to know there still is a spare—just tucked away inside—while the swinging rear gate is replaced by a more typical liftgate—power adjustable on top models.

Pieces and parts of the new RAV4 package

The 2013 RAV4 has a 2.5-liter four-cylinder engine, mated to a new 6-speed automatic transmission (which is lighter than its predecessor by 6.5 pounds). The V6 engine is dropped from the lineup. The philosophy on this is simple: either appreciate the increased fuel efficiency of the 2.5L—which Toyota gambles will be the case for most shoppers in this category—or move to the Toyota Highlander if you really need that V6. Ditto on a third row—the seven-seat RAV4 option is gone. (The take rate on the V6 RAV4 had been in the teens.)

The RAV4 now delivers 31 MPG highway, surpassing the key 30 MPG threshold after the prior model’s 28.

The new Toyota RAV4 can be bought in either front-

wheel- or all-wheel drive. In AWD form, this is the first RAV4 with Toyota’s Dynamic Torque Control, an integrated, fast-response system using electronic stability functions to distribute power among the four wheels, based on speed, angle, yaw and other input. The new system’s calculations are based on more information than before, including data from the engine, transaxle and electric power steering, and it has three modes.

In Auto mode, Dynamic Torque Control distributes up to 50 percent of power to the rear wheels for acceleration, but all power to the front at cruising speed. When braking, AWD is disengaged to optimize ABS and Vehicle Stability Control.

Lock mode transmits maximum torque to the rear at speeds up to 25 mph, for better traction in mud or snow, or for immediate power to all four wheels when stuck. Above 25 mph, it switches back to Auto.

And a new Sport mode adjusts transmission, throttle, AWD and power steering for more responsive driving on dry pavement, with four-wheel traction.

Combined with the new 6-speed transmission, the RAV4’s new system promises less “hunting” as it works its way through ideal gear settings.

Dynamic improvements go well beyond electronics, with the RAV4 receiving a retuned suspension featuring coated dampening shafts and a bigger rear sway bar.

The interior has been reengineered to accommodate that stashed spare tire, and also to provide more rear occupant space—partly via scalloped front seatbacks—while delivering an interior cargo volume of 73.4 cubic feet when the back seats are down, an increase of about 2 cubic feet—enough to add two basketballs.

The driver’s personal dynamics are addressed with an increased range of seating and steering wheel positions. Heated seat zones cover more areas at higher settings. Climate controls are built around a simple and very welcome three-knob design. The RAV4 is outfitted



KEEP RIGHT >>



with eight airbags.

Removal of the external spare tire also drove attention to body styling in the rear, which has clearly benefited. New body engineering in the front creates Euro-spec pedestrian impact zones and crash-absorbing fenders. Aerodynamics are improved throughout, creating more ride stability as well as improved fuel economy.

The new RAV4 model lineup

Toyota has identified the RAV4 buyer as seeking a good level of standard amenities, with options and models available, but not overwhelmingly so.

The 2013 RAV4 lineup represents a simplified strategy, with LE, XLE and Limited versions. The LE version includes a great many standard items, such as a back-up camera (with 6.1-inch screen) and privacy glass, at a starting price of \$23,300 for the FWD model.

XLE delivers about \$2000 in additional equipment for about \$1000 in additional price—including sport-bolstered, French-stitched seats, 17-inch alloy wheels (replacing the LE's steel wheels and covers), a power tilt/slide moonroof, dual-zone climate, heated mirrors and more. Add navigation and the Toyota Entune® system with voice recognition and text-to-speech—as most buyers will—and you are still at \$25,320.

RAV4 Limited buyers gain a complement of included features, from that adjustable power liftgate—along with keyless entry and start—to a leather-trimmed shift lever and 18-inch wheels. High-tech options available at this level include blind spot monitor and rear cross traffic alert, plus an available JBL eleven-speaker audio system. The Limited starts at \$27,010.

Toyota expects about 40 percent of customers to buy the middle XLE model, with 30 percent each opting for LE and Limited trims. Any RAV4 trim level is available with all-wheel drive for \$1400 more. The AWD share is expected to be about 65 percent, the same as with the prior generation. All these percentages apply to an ambitious goal overall: to top 200,000 units for the year.

Northeast Valley launch tour

New vehicle launch drives can have us traveling anywhere, but this one was near our offices in northeast metro Phoenix. Three loops started at the junction of Scottsdale Road and Carefree Highway. The most interesting and valuable drive was northeast toward Bartlett Lake and out Seven Springs Road, always a fun drive with ample opportunity to test the vehicle's stability controls, modes, steering and handling.

Electric power steering can be good, bad or invisible (which is also good). The RAV4's steering, coupled with its delivery of torque to varying wheels in varying ratios at varying speeds, met the challenge of this road, with its tight curves, narrow pavement and constant elevation changes. We turned around at an off-road point that is barely a road at all, which we took to the bitter end. We give the new RAV4 high marks on all of it.

RAV4 buyers are typically in their 30s and 40s, many with children. The 2013 Toyota RAV4 is stylish, full-featured and performs well. Pricing is favorable enough to drive you straight to the top model, while it is comforting to know the basic package is available at very reasonable cost. As has been the case for almost two decades, the RAV4 belongs on anyone's list. ■

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Extended play

Ford's 7-passenger not-a-van has cool command of the road

by Joe Sage

The last time we drove the newest Ford Flex was at its launch (which also included the new Mustang and Taurus) about ten months earlier. That adventure took us through heavy wind, rain, sleet and snow from Portland, Oregon, over the mountains to the Pacific Coast and back. We drove the Flex on the and-back part, tackling snow, sleet and rain through the mountains. The nasty weather seemed to have tracked us down again when we had the Flex here in Arizona for a week this winter.

Ford's first bragging point for the updated 2013 Flex is its heavily reworked front sheet metal—which they consider perfect for “people who want to stand out from the crowd.” When we had first seen this treatment at the LA Auto Show a year or so earlier, it reminded us of Frozone from *The Incredibles*, or Cyclops from *X-Men*. But as we also noted at the time, those characters were both very cool. Starting with a basically boxy and utilitarian format, the Flex has always been an eye-catcher. Ford points out that the front's boxy edges have been rounded a bit in the new model, but boxiness is still its signature style point. Why fight it?

The interior has also been reworked, with new instrument clusters, steering wheel, seat trim and padding, and electronic panel finishes. Rain-sensing wipers, power-fold mirrors and passive entry/start—which allows remote unlocking and engine start—are also new. A new iteration of MyFord Touch®—intended to address customer feedback—provides two 4.2-inch screens in the instrument cluster and an 8-inch screen in the center stack.

At your fingertips are thumb shifters for a new SelectShift™ six-speed

With four large conventional doors, a three-seat second row with 60-40 split, and spacious fold-flat third-row seats, the Ford Flex offers all the flexibility you need to juggle family, friends and freight.

gearbox, offering fully automatic or manual control.

The Flex comes with either of the same two V6 engines as its platform-mate Taurus for 2013: the 285-hp standard 3.5-liter or the 355-hp EcoBoost. (An EcoBoost four is not available on the Flex, so far.) The conventional V6 with front-wheel drive achieves the best fuel mileage, at 18/25 MPG city/highway. This drops to 17/23 MPG with all-wheel drive, but we would find that tradeoff well worth it. The EcoBoost, despite its Eco tag, has lower fuel mileage, at 16/23 MPG city/highway—but don't forget its prodigious horsepower, about 25 percent stronger than the TI-VCT six, with a fuel economy drop of just eight to ten percent or so. And in real world conditions, the horsepower is sure to be noticeable. Fuel economy in real world conditions is famously variable. Now if only the EcoBoost came with all-wheel drive.

The Flex rides on any of multiple wheel options, including a new 20-inch machined aluminum model. The vehicle makes its closing statement with new standard dual chrome exhaust tips. These are the type of details that help the Flex do one of the other things it does best: be a great family vehicle while beating any stigma that might otherwise be found with its obvious alternative: a minivan.

Ford's big utility vehicles have been enjoying double-digit sales growth. While the Explorer's high degree of recognition brings customers in, many then discover the Edge and the Flex. The Flex is quickly the champ for those who need its three-row, seven-passenger layout and huge cargo space. The loyalty rate among Flex buyers is tops, with over 70 percent going on to buy another Ford product. It also attracts “conquest” buyers: fifty percent of customers who buy a Flex are buying their first Ford. But sales had been dropping off for a year or two; with this restyle and upgrade, Ford hopes to provide a course correction.

The cooler family car

It took us no time at all to appreciate the key character difference delivered by the Ford Flex. By the first time we were on the freeway—driving next to a minivan—we were thinking of several specific friends and colleagues who have taken a keen interest in the Flex. These are family folks, with both cargo and precious cargo to haul, but they all would prefer basically a more masculine truck or car, to a minivan. Unless you particularly want sliding side doors, this seems functionally equivalent and has none of that minivan stigma. The Flex is carlike, trucklike, mainstream.

When all seven seats are taken, cargo capacity behind the third row is 20 cu.ft., but with only five occupants, you can knock down the third row and more than double that, exceeding 40 cu.ft. Just honeymooning? With the middle row also down, cargo volume exceeds 80 cu.ft. There are a solid handful of seven-passenger vehicles in the marketplace, but matching the fuel economy, road-hugging stance and flexible overall volume of the long Flex is a tall order. (As noted last year, the Flex can look a mile long, but it's built on the same platform as the superb-handling and SVT-ready Ford Taurus.)

Ford's family-, friends- and freight-friendly Flex commands the road

We had picked the Flex up at the airport for a late drive home. With luggage in hand, we discovered the rear hatch is not powered, to our surprise, though that actually suits us fine (we hate to wait). The driver's seat has one of our least favorite features: it puts itself where it thinks is best, while you're away, then “presents” itself as you get in and try to sit down, moving below you and pushing you around. This we would disable if we owned the vehicle. Settling in and looking around, we confirm that the Flex is indeed big. We had been convincing ourselves that it looks big because it's long and relatively low and narrow—but it's sizable inside. The relative narrowness is appealing, reminding us of the Infiniti QX56, which is pitched as being akin to a personal jet aircraft inside. And though its overall stance and appearance are relatively low, headroom is abundant.



KEEP RIGHT >>

SPECIFICATIONS

2013 FORD FLEX LIMITED AWD

ENGINE3.5L RI-VCT V6
POWER/TORQUE285 hp / 253 lb-ft
TRANSMISSION6-spd SelectShift™
DRIVETRAINAWD
MPG (EST).....17/23 city/hwy

EXTERIOR: incl HID headlamps, fog lamps, LED taillights, keyless entry, power-folding-heated mirrors w/approach lamps and memory, power liftgate, privacy glass, capless fuel filler, chrome door handles, chrome exhaust tips, bright beltline molding.

INTERIOR: incl leather trim seats/wheel, 10-way power driver seat, 50/50 fold-flat third row, dual-zone climate, ambient lighting, adjustable pedals, overhead console.

FUNCTIONAL: incl Sony 390w 12-spkr audio, Sirius sat, Sync w/MyFord Touch, nav, blind spot info, rear camera and sensing, keyless pushbutton start, powerpoints & 110v outlet.

SAFETY-SECURITY: incl AdvanceTrac/RSC, airbags incl front-side-canopy, SOS post crash alert system, TPM.

BASE.....\$41,180

- Equip. group: adaptive cruise; coll. warn- ing; power fold 3rd row seat.\$2500
- Inflatable rear seatbelts.....195
- Two-tone: silver roof.....395
- Destination825

TOTAL.....\$45,095

Freeway passing power is nothing stunning but more than adequate, though the car can generate a noticeable growl when you punch the gears down. Overall, the transmission is effective, downshifting and accelerating as demanded, in some tight spots.

Proof that it's long? We benchmark a four-lane divided boulevard U-turn, and on our first, the Flex was utterly incapable of pulling it off, forcing a hasty multi-point maneuver as traffic started bearing down. No surprise, once we verify a 40.7-foot turning circle (compare with the Jeep Grand Cherokee's 37.1). On a later attempt, elsewhere, with more planning and by taking a wider loop farther into the intersection, we did eke it out.

The vehicle looks downright sexy, the more time we spend with it. Our first impressions of the revised sheet metal develop into appreciation, as we note others in traffic and remind ourselves that "distinctive" is pretty hard to come by. One of its most endearing style points is the availability of a contrasting roof, much as on a MINI—which also offers practicality, in a hot desert climate: you can choose your favorite color overall and still finish it off with a silver or "white suede" top.

We were glad to have all-wheel drive during our week of heavy rain, although the Flex's long wheelbase should provide a steady track even as a front-driver. (AWD models will still give the best service on slippery surfaces such as snow or sand.) In an impromptu parking lot slalom, we generated a little bit of wobble, a little bit of yaw, everything but pitch. But considering this vehicle is part private school bus, it was negligible. For a seven-passenger coach, it's impressive.

Long story short

Some people expect the Ford Flex to be bigger than it turns out to be, while others expected it to be smaller. Part of that is style positioning. We've mentioned the

MINI parallel, really just based on the contrasting roof. Others told us they thought it would be like a Scion xB, thus startling them with its seven-passenger bulk. Someone else compared it to the Chevrolet HHR, a very small vehicle that nonetheless functions widely as a commercial taxi. Basically, each carries its own persona, separate from the functional comparative. Bottom line: the Ford Flex is none of those—and not a minivan—but in many ways perhaps an extended reincarnation of the classic Ford Country Squire station wagon of the '50s through '80s (until the minivan came along to eclipse it).

We had our usual variety of logbook notes on details such as the seats with a frustrating mind of their own, some annoying audio controls, an inability to set climate with gloves on, and a propensity for beepers and buzzers to scold us about quite a few things. On the plus side, the Flex has ceiling-mounted ventilation for the rear seats, rare and a requirement for at least one dad we know.

We revisited that Infiniti QX56 comparison—talking here about a vehicle with a base price north of \$60,000 that can easily top \$80,000—thinking again how the Flex cabin reminds us of that, simultaneously feeling so spacious yet so intimate. The difference with the Flex—a vehicle with three trim levels starting in the \$30,000-40,000 range and easily maxed out at under \$50,000—may be that it doesn't have the over-the-top finishes and surfaces of an Infiniti, but does have a simple, rich soft-touch interior that we liked just fine. Consider it a family QX56.

Based on substantial feedback during our week, the dads—family guys with both kids and testosterone—stand out as a group, seeing something that has very cool style, is otherwise as useful as a minivan, and is also good for a hardware store getaway.

The whole family should find a whole lot to like in their own little private school bus. ■



MARCH

March 8-10 • Scottsdale, AZ ▲◆

★ 4th SPRING NATIONALS

WestWorld of Scottsdale — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

March 15-17 • Fort Worth, TX ▲◆

★ 3rd SPRING LONE STAR NATIONALS

Texas Motor Speedway — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

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Fairgrounds in Pleasanton — Featuring All Years of American Made & Powered Hot Rods, Customs, Classics, Muscle Cars and Trucks, Goodguys AutoCross, Vendors, Swap Meet & Cars 4 Sale Corral.

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★ 13th MEGUIAR'S DEL MAR NATIONALS

Del Mar Fairgrounds — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

MAY

May 17-19 • Nashville, TN ▲◆

★ 8th NASHVILLE NATIONALS

LP Field, Tennessee Titan Stadium — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

JUNE

June 1 & 2 • Pleasanton, CA ▲

20th SUMMER GET-TOGETHER

Fairgrounds in Pleasanton — Featuring All Years of American Made & Powered Hot Rods, Customs, Classics, Muscle Cars and Trucks, Goodguys AutoCross, Vendors, Swap Meet & Cars 4 Sale Corral.

★	National Event
🏁	Drags
▲	AutoCross
◆	All American Sunday

June 7-9 • Loveland, CO ▲◆

★ 16th COLORADO NATIONALS

The Ranch Events Complex — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

June 14-16 • West Springfield, MA ▲◆

★ 22nd GRUNDY WORLDWIDE INSURANCE EAST COAST NATIONALS

FATHER'S DAY WEEKEND!

Eastern States Exposition — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

JULY

July 5-7 • Des Moines, IA ▲◆

★ 22nd HEARTLAND NATIONALS

Iowa State Fairgrounds — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Saturday Night Fireworks Extravaganza, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

July 12-14 • Columbus, OH ▲◆

THE BIG ONE!

★ 16th GOODGUYS PPG NATIONALS

Ohio Expo Center — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Friday Nite Vintage Drags, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

July 26-28 • Puyallup, WA ▲◆

★ 26th WESCO AUTOBODY SUPPLY PACIFIC NORTHWEST NATIONALS

Puyallup Fair & Events Center — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Friday Nite Vintage Drags, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

AUGUST

August 16-18 • Spokane, WA

★ 12th GREAT NORTHWEST NATIONALS

Spokane Co. Fair & Expo Center — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

Goodguys Schedule as of 10/15/12. All dates subject to change.

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August 23-25 • Pleasanton, CA ▲◆

THE CROWN JEWEL!

★ 27th WEST COAST NATIONALS

Fairgrounds in Pleasanton — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Vendors, Swap Meet, Cars 4 Sale Corral, Mini Engine Display.

SEPTEMBER

September 20-22 • Indianapolis, IN ▲◆

★ 3rd WIX FILTERS SPEEDWAY NATIONALS

Indianapolis Motor Speedway — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

OCTOBER

October 4-6 • Fort Worth, TX ▲◆

★ 21st LONE STAR NATIONALS

Texas Motor Speedway — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

October 25-27 • Charlotte, NC ▲◆

★ 20th SOUTHEASTERN NATIONALS

Charlotte Motor Speedway — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

NOVEMBER

November 9 & 10 • Pleasanton, CA ▲

24th AUTUMN GET-TOGETHER

Fairgrounds in Pleasanton — Featuring All Years of American Made & Powered Hot Rods, Customs, Classics, Muscle Cars and Trucks, Goodguys AutoCross, Vendors, Swap Meet & Cars 4 Sale Corral.

November 15-17 • Scottsdale, AZ ▲◆

★ 16th SOUTHWEST NATIONALS

WestWorld of Scottsdale — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.

November 22-24 • Del Mar, CA ▲◆

★ 3rd FALL DEL MAR NATIONALS

Del Mar Fairgrounds — Featuring Hot Rods, Customs, Classics, Muscle Cars and Trucks thru '72, Goodguys AutoCross, Vendors, Swap Meet, Cars 4 Sale Corral & All American Sunday.



TOP-TIER PIONEER MODEL MAKERS

PRICELESS ORIGINALS GATHER IN PHOENIX

STORY AND PHOTOS BY LARRY EDSALL



Like so many other boys of my generation, I saved my pennies and I saved my dimes (“giddy up, giddy up 409”) and when I had enough of them I’d spend them on an AMT or Revell model car kit.

Except for the tires, the pieces in the kits were made of plastic. Those parts included the body shell, dashboard, seats, steering wheel, the various components that formed the engine and transmission, and dozens and dozens more.

Most everything was white in color, though windows and headlights were clear plastic, tail lamps were tinted red, and bumpers had a chrome-like finish.

Also included was a fold-out sheet of instructions, and a sheet of decals so you could customize your car with flames or pinstripes or race car sponsor badges.

The kits were sold in hardware stores or at the local “5-and-Dime” store, where you also could buy small spray cans of paint to make your car and its components look even more realistic.

Provided, of course, you had both patience and skill. I had neither.

It was hard enough just to separate the various plastic pieces from the frames in which they were molded, let alone go back with an X-Acto knife and try to smooth off the little bumps that remained from the connection points.

Then there was the matter of trying not to drip or smear or spill any of the Testors glue onto your car’s finish during assembly—a challenge made more difficult because all the while you were inhaling the intoxicating fumes the glue emitted as soon as you removed the cap from the tube.

Painting presented more frustrations—in part because you were supposed to paint components before they were glued together but always were in such a hurry to assemble your model that there was no way to avoid horrible overspray.

And I don’t think I ever applied a set of decals without bumps and lumps.

Memories of my inability to assemble supposedly easy-to-use model car kits rushed back into mind while I was looking with awe at model cars boys of my generation had created not from a kit but completely on their own, from doing the original design to the construction from wood, plaster, metal and paint. Their cars were designed so creatively and built so

skillfully that these boys won college scholarships, and many went on to careers creating not just model cars but the vehicles we’ve been driving on the roads and highways for several decades.

Those boys built their cars as part of the Fisher Body Craftsman’s Guild scholarship competition, which General Motors sponsored from 1930-1968. Several dozen Guild alumni and their model cars were in Phoenix recently for a reunion they held in conjunction with the annual Arizona classic car auctions.

For two days, the model makers shared their stories and showed their cars in the lobby of the Arizona Biltmore, the resort where the RM Auctions company was selling full-size classic vehicles at prices ranging well into seven figures.

Several of the Guild alumni told of spending considerable amounts—not in dollars but in time, typically 700-800 hours building each model. But their efforts paid off in scholarships that enabled them to attend college and then enter and enjoy careers as car designers or in other fields, from teaching to engineering.

Many of those stories have been captured in two books—*The Fisher Body Craftsman’s Guild: An Illustrated History* and *Inside the Fisher Body Craftsman’s Guild: Contestants Recall the Great General Motors Talent Search*, both written by John Jacobus, a Guild alumnus and long-time US Department of Transportation auto safety engineer.

For many of the Guildsmen, the contest was a life-changing event, especially for those who won scholarships that allowed them to go to college.

Anthony Joslin said his parents had saved enough money for him to attend college, but that when he won a GM scholarship, his parents used the money they’d saved to buy the only house they ever owned.

Even though he didn’t win a scholarship, Jeff Jones said participating in the model-building contest “was a seminal point in my life.” Building his cars led him to study mechanical engineering and then to a career as an oil-field engineer.

The reunion was another such event, Jones said. “I had never met any of the guys or seen any of these cars before,” he said at the reunion, where he was making new friends and offering to help with planning their next gathering. ■



The 2013 event at the Arizona Biltmore was the third national reunion. The first was held at the GM Design Center in Warren, Michigan in 2004, and the second at the Boston Museum of Fine Arts in 2008. Several smaller regional Guild reunions have been sponsored by individual Guildsmen. The Smithsonian has a collection of top Guild models, as does the GM Heritage Center in Detroit. Private collectors are snapping up these models at flea markets and on eBay.



Born a rebel.

An R-Design in Rebel Blue, ready to rock and roll.

By Joe Sage



What makes the Volvo S60 different from your great-aunt's Volvo of thirty or forty years ago is, well, thirty or forty years—of technological advancements, as well as some philosophical evolution about what makes a well-engineered car a great thing to own and drive on a daily basis. Safety—the Volvo brand's distinctive *raison d'être* back in the day—is still delivered in top form, but this is not as distinctive as it was then, thanks to legislative mandates and engineering improvements across the board.

What makes the Volvo S60 distinctive today is its carefully crafted balancing of mainstream utility, safety and technology with performance and—perhaps somewhat unexpectedly—a dose of bad boy charm.

OUR VOLVO S60 T6 AWD R

What defines our particular test S60 within the model lineup are three things, as revealed in its complex alphanumeric "T6 AWD R" name. First, it bears a T6 six-cylinder twin-scroll turbocharged engine (as opposed to the T5 five-cylinder turbo also available). Second, it has all-wheel drive. And third, it bears the trappings of an R-Design model (see sidebar for inclusions).

Much of this model's name is redundant, as every T6 model is an all-wheel-driver (while T5 models have front-wheel drive standard, with AWD as an option). And S60 R-Design models all have the T6 engine and AWD.

Another sure sign that our test S60 is an R-Design is its paint: this vivid Rebel Blue finish—as cool as a blue gas flame—is an R-Design-only option. Similar blue appears on other Volvo performance products, from the small badges on Polestar models (see our May/June 2012 issue), to Volvo's top European racecars. And Rebel also conveniently starts with R.

There are also Premier, Premier Plus and Platinum models variously available among the three (T5, T6 and T6 R-Design). The farther you swim upstream, the fewer of those model options there are, as the base models are successively better endowed. At the R-Design level, the car is already so well appointed that it only has enough headroom left for a Platinum version.

The Platinum trim level is the only thing missing from our tester—well, that and one tech package, as delineated in the sidebar. Platinum would be a \$2700 add-on, bringing you voice-activated nav, upgraded audio and a park-assist rear camera. Add that, along with the \$2100 tech package, and with destination the car would creep to just a hair above \$50,000. That's still very competitive, in a segment full of well-known German and Asian performance sedans. Volvo would like to get your attention in this segment, making this a good time to buy in.

THE T6 R-DESIGN MODEL NICHE

We're actually big fans of Volvo's 2.5-liter T5—a near-reincarnation of the superb five Audi brought us in the '80s and '90s, striking a great balance among weight, power and smoothness, between a four and a six.

But a six is an easier sell, so it often ends up in some of the best cars. The 3.0-liter T6 S60 weighs about 300 pounds more than the front-drive T5, but is distinctly more powerful: 300 hp versus 250, or 325 hp with the R-Design we are driving here. That's a 30 percent increase in power, with just an 8.7 percent gain in weight. With the AWD option on a T5, the weight gap



approaches being negligible.

No matter how you slice it, we found our Volvo S60 to be a potent combination. And still priced in the \$40s.

The T5 has a base price of \$31,900. All-wheel drive adds \$2000 to this. Skip the trim packages, maybe get some sport pedals, definitely get the AWD, and you're still at \$35,325. Ten grand less than the T6 R-Design. But not available in Rebel Blue, and read that R-Design feature list again, at right.

The tires, wheels and chassis make a noticeable difference. Spoilers and diffusers help performance and fuel economy (rated at 18/26/21 MPG city/highway/combined, the same as a non-R T6). Power was impressive, with no turbo lag. In fact, we noted a distinct turbo boost at every punch. This is one potent Volvo.

The T5 does get as much as 30 MPG highway in FWD. That's a fuel economy advantage of 15.4 percent, but still with that power advantage of 30 percent. If you know where your priorities lie—power vs MPG—you can decide easily enough. If you value both, you could find an easy rationalization in either, although the math ultimately favors the power of the T6 R-Design, if budget allows.

The S60 R-Design has a standard Sport chassis. The T5 has a chassis tuned for Touring. In between, the non-R T6 has a Dynamic chassis, but is available with a FOUR-C Active Chassis (Continuously Controlled Chassis Concept), which allows you to switch among Comfort, Sport and Advanced settings. The lower-tier T5 and the upper-tier T6 R-Design do not offer this, and we did note some floatiness to the suspension in the R-Design, when we might hit a rare bump around town. At highway speeds, though, or actually in most any normal use, it hunkers down and handles very well. But we're still curious how that FOUR-C might adapt to this setup.

Ultimately, this sedan has everything we want: the comfort and presence of a relatively large car, with the power and maneuverability of a relatively sporty one. ■

2013 VOLVO S60 T6 AWD R

DRIVETRAIN AND ELECTRONIC HANDLING

- 3.0L 6-cylinder twin-scroll turbo DOHC alloy engine with CVT: 325 hp, 354 lb-ft: ULEV II
- 6-speed Geartronic auto w/ Sport Mode
- AWD with Instant Traction
- ASC; DSTC w/Sport Mode
- Independent strut front susp w/ anti-dive
- Fully independent multi-link rear susp
- Torque vectoring corner control
- Driver-selectable speed-sensitive steering
- Ventilated disc brakes w/ ABS
- EBD/EBA: electronic brake distrib/assist

R-DESIGN FEATURES

- 18-inch alloy wheels with all-season tires
- R-Design sport chassis
- R-Design front and rear spoilers
- R-Design rear diffuser and polished pipes
- Leather seating surfaces, accent inserts
- Blue watch-dial instrument cluster
- Aluminum inlay and sport pedals
- Perf. leather steering wheel and shift knob

PRICING

BASE	\$43,900
CLIMATE PACKAGE: Heated front seats, heated windshield washers, interior air quality system	\$700
DESIGNATION	\$895
TOTAL	\$45,495

NOTE: Technology Package also available but *not* included in our test build would provide adaptive cruise control, lane departure warning, distance alert, collision warning and pedestrian protection with full auto-brake, road sign information and active high beam, for an additional \$2100.

king of the road

striking the perfect balance between comfortable isolation and full road engagement

By Joe Sage

We drove the redesigned Lexus LS flagship lineup at its launch in Tucson last fall (see the Nov-Dec 2012 issue), including a standard-wheelbase LS 460, long-wheelbase LS 460 L, new LS F SPORT performance model and LS 600h L hybrid, also a long-wheelbase model. Back with us for another week this winter was the conventional powertrain LS 460 L long-wheelbase.

The restyling of the LS is apparent, starting with the signature "spindle grille" that is being applied throughout the brand's lineup. Beyond this facelift, there is intense reengineering: over 3000 out of 6000 parts on the car, not counting nuts and bolts, are new. The car appears lower, wider, and more athletic. Instruments are divided into upper (display) and center (operation) zones, to reduce leaning and reaching. Seats are sportier. Rear passengers have audio and climate controls, and in the Executive Class package have luxurious reclining rear seats with ottomans and a vibrating massage feature.

A 12.3-inch panel with second-gen remote-touch interface has nav routes, turn-by-turn and phone info in a three-way split screen. Four-zone climate control is joined by four-zone heated and cooled seats. There are two available Mark Levinson premium audio systems.

Countless small details improve weight, aerodynamics and thus fuel efficiency. Noise-vibration-harshness, already exemplary in the LS, are improved further. Advanced safety systems build upon Lexus "millimeter radar" and near-infrared sensors, for blind spot monitoring, rear cross-traffic alert, collision warning, advanced pre-collision and dynamic radar cruise control.

This long-wheelbase model is not the most expensive, at base cost. Ours, an all-wheel-drive model, was an early build, delivered with no Monroney sticker, so no pricing or options listings. But its starting price would be \$81,775 (\$78,290 if it were RWD). A standard-wheelbase LS runs about \$6300-6800 less. Nineteen different option packages range from \$4,740 to \$16,130 each (and then there are individual options). The new F SPORT is achieved via option packages priced at \$15,230 or higher. The LS 600h L hybrid tops the lineup at a base price of \$119,910, though that includes much of what is optional on the others. There are only two packages for the hybrid (both priced: \$11,620 and \$12,335, though the pricier package adds all those royal touches in the back seat). Our LS 460 L had a great many options built in and was surely lapping into six digits.

A signature detail of the LS family is its L-shaped taillight assembly. Context-aware and user-adaptable instruments include this available three-way split screen in the center stack. The LS 460 L experience is only complete once you've stretched out and enjoyed the reclining back seat and ottoman.

Pieces and parts

Interior finishes of brushed aluminum, deeply polished wood (very slick, but attractive to its audience), two colors of leather—a dark taupe and ivory—look nice. Only the familiar shiny clock bezel looks out of place.

Heated and cooled seats have an Auto setting; this is an unusual detail, and we wonder how smart it is. On a cool morning, dressed in shorts, we set it on Auto and forget all about it till much later. We conclude it was either unnecessary or really well engineered, or both. Most likely it's really well engineered.

We had this car right up until half an hour before it famously and amazingly snowed in the Valley in late February. On a 42-degree morning, we went for the heated steering wheel. This was a blessing, but apparently only the upholstered part heats up, at 3 o'clock and 9 o'clock, which is a very limited part, while the slick wooden majority of the wheel was very cold.

The trunk is huge. Its latch button is tiny. We found ourselves on one knee, looking for it, more than once. The good news is, you can close the trunk with the electric button, or you can just slam it shut, quick and easy. Also on the plus side, the electric button is lighted, so you don't have to reach, grope and guess. On the downside, if it's pouring rain, as it was for us one day, the open trunk drains its load straight into the trunk.

The electronic parking brake has an Auto option (as do quite a few things in this car)—a convenient plus.

We had annoyances with radio presets and touch-screen icons that weren't actually touch. Keyless locking response was noticeably slow and therefore uncertain. Since this was a preproduction unit, it's possible not everything is in final build, and we surely would have benefited from a manual. You'll have that when you buy yours. Some things are here to stay, though, such as a rocker switch for some audio functions, oddly placed on the console, somewhat in conflict with the shifter.

We made a point of spending some time in the back seat of the LS 460 L, to experience its luxury and also to try to glean the details of this car's build options. We had done this at the launch near Tucson a few months ago, too, though this time we didn't find the massage function. Much as we love to drive, it's not hard to visualize a session back here leading to "hey, you drive."

Driving style

We start off as we would in most any vehicle, ignoring the back seat and slipping behind the wheel. This, despite the back seat being fit for a king or two.

There are three available drive modes: Normal, Eco (maximizing fuel efficiency) and Sport (amping up shift and throttle performance). Cars equipped with optional air suspension also have Comfort (with cushier suspension) and Sport S+ modes (Sport S+ adds aggressive steering to Sport's shift/throttle enhancements).

We have a tendency to prefer driver's cars, those that provide a good feel for the road and a level of connect



SPECIFICATIONS

2013 LEXUS LS 460 L	
ENGINE	4.6L V8
HP	360
LB-FT	347
DRIVETRAIN	AWD
TRANSMISSION	8-spd automatic
0-TO-60 MPH	5.9 sec
MPG (EST)	16/23/18 (city/hwy/comb)
EMISSION CERTIFICATION	ULEVII
WHEELBASE	121.7
LENGTH	205.0
LEGROOM (REAR)	36.7
CARGO (CU.FT.)	18.0
WEIGHT	4695

KEEP RIGHT >>



Advanced electro-mechanical systems provide a variety of engine, suspension and steering tunings for varying conditions or personal impulses. The 18-cu.ft. trunk is wide and deep. Your limo awaits.

Luxurious length is the name of the game, but handling is always appreciated. We tested a divided boulevard U-turn—a 180 from a left-turn lane into two lanes on the far side—and found the car had plenty of room, seeming better than some smaller vehicles lately. The actual specs are full of surprises. There are fully six different turning circles for the LS, depending whether it's the "L" model or not, whether it has air suspension or not, and whether it's AWD or RWD. The "L" has a 4.8-inch longer wheelbase than the standard, and yet, surprisingly, it claims the same turning circle as the shorter car: 35.4 feet with 18-inch or 36.0 feet with 19-inch wheels. All-wheel drive makes a big difference, bringing the SWB model up to 37.4 feet and our LWB up to 38.8 feet. Against our benchmark Jeep Grand Cherokee and its 37.1 feet, this luxu-liner does very well.

Our LS came with automated headlights capable of much more than low and high beams. In fact, we never figured out its full algorithm. Driving on a country road, some of its range could probably save a life. Around town, we never defeated its desire to spotlight folks taking an evening stroll. This may be a pre-production quirk.

Our final drive was to the airport—freeway time in the pouring rain, sharing the roads with plenty of people

who don't like that kind of driving. Faced with a few of their sudden moves, we had time to check our mirrors and avoid all they threw at us, without ruffling a feather on the LS 460 L. It consistently proved itself to be a fine and confident machine.

Riding in style

There were times we found ourselves comparing the LS 460 L with other cars in a parking lot or on the road. Next to a Kia Optima, we contemplated just what exactly it delivered for four or five times the Kia's price. Next to a Volkswagen CC, we wondered whether the considerable heft of the LS L was desirable or overkill. As time went by and we continued to compare, we found the Lexus was ultimately a great package, and everything else started to look too small. It's a well-balanced machine, and the rest can be chalked up to relativity and budget.

Speaking of relativity, we remain intrigued by how quickly a \$70,000-or-so car can become a \$120,000-or-so car, either of them a luxury sedan. A paradox kicks in, in that as the price climbs to \$100,000 and above, rear seating becomes palatial. The Lexus LS 460 L is a fine handling and powerful car, fun to drive. But having invested in the long model, you might want to be more rider than driver. (Or maybe you like to entertain while on the go.) If not, you could save a lot of dough with a short-wheelbase LS 460, especially by forgoing some of the more regal option packages. Does that miss the point of the car? Maybe yes, maybe no. If the whole point is luxurious splendor, spend away. If the whole point is personal luxury and performance, you can spend less.

The LS lineup has enough variety and enough overlap to deliver the precise preference of anyone with the budget for this kind of road-going elbow room.

Ride or drive, you will feel like moderate royalty. There are a good handful of vehicles that can make you feel like this—Mercedes-Benz S Class, Bentley, Rolls-Royce—but there aren't as many that are sleepers, less obvious or ostentatious. Perhaps the Audi A8, or the VW Phaeton when it briefly existed. You know what you have under you with this Lexus, and it's something very special. Bottom line: if this were your car, you'd likely never tire of it. Our logbook includes references to "great comfort and power" and "driving along dreamily" in a car that is "powerful, smooth and comfortable." There are precious few other things you'd see on a daily basis that you'd wish you had instead. ■

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If you need a hybrid, but not all-wheel drive

By Jim Prueter and Joe Sage



Ford takes dead aim at current hybrid champs

When Ford recently introduced the completely redesigned Escape for 2013, they decided to discontinue the Escape hybrid model, due to a high degree of overlap with the new 2013 Ford C-MAX, a dedicated hybrid crossover utility vehicle.

In fact, the C-MAX will be offered in not one, but two hybrid models: the C-MAX Hybrid and the C-MAX Energi Plug-In Hybrid, available soon. (C-MAX has been sold in Europe since it was first launched there in 2010.)

C-MAX ENERGI PLUG-IN HYBRID. You charge the C-MAX Energi by connecting the vehicle's external charge port to either a standard 120-volt outlet or available 240-volt charging station. The C-MAX Energi delivers better fuel economy equivalent in electric mode than a Toyota Prius plug-in hybrid, with a 500-mile overall driving range that bests the Chevrolet Volt. It will also operate in all-electric mode at higher speeds than any other hybrid. Once the electric charge is exhausted, the C-MAX Energi automatically continues operation like a tradition-

KEEP RIGHT >>

If you need all-wheel drive,* but not a hybrid**

By Jim Prueter and Joe Sage

*(optional)
**(optional in the past but no longer)



Popular SUV gets dramatic new styling, loses hybrid

After 12 years on the market, the small-sized, family-friendly Ford Escape utility vehicle has finally received a full redesign for 2013. The new Escape arrives this spring with a starting price of \$22,470. A fully-loaded top-of-the-line Titanium trim level starts at \$30,370, or \$32,120 with all-wheel drive like our test model.

Ironically, overall sales of the current model had improved 33 percent, with the 2012 model the best selling in its 12-year history and beating the second-place Honda CR-V by about 36,000 units. Escape is the number two best-selling Ford vehicle and the fifth best-selling vehicle of any brand in the US.

The new Escape looks nothing like the current boxy-styled model. The striking new design features a sloping rear roofline, gaping split grille, angular shaped head and taillamps. It shares styling cues with Ford Fiesta and Focus. It's also four inches longer than its predecessor and adds three inches to the wheelbase.

KEEP RIGHT >>



LOGBOOK NOTES : C-MAX

- We drive in utter silence for the first bit, no whirring as in an electric.
- Brakes are exceptionally strong.
- On broad sweeps, the C-MAX is quiet and smooth, but steering can be twitchy, for an odd mix between underresponsive and overresponsive.
- The CVT has a responsive kickdown feature, providing a comfortable power curve. You can almost feel a series of very subtle surges, which don't feel like shifts but also don't feel like straight line continuity. Acceleration, competitive maneuvers and sharp cornering can produce slight hesitation but generally strong and dependable shifts and moves.
- Then again, a right turn on surface streets seems to "fake left" at times, and movements at slow speed are abrupt.
- We were surprised to find ourselves driving slower than others at times.
- We have a series of beefs with the touchscreen interface, not unusual.
- The C-MAX has no towing capability.
- Grade assist, with a button on the shifter, can be too easy to click on by mistake.
- We barely made our boulevard U-turn, though specs state a 35.8 turning circle. Others have had the same experience.
- Acceleration, cornering, steering and an odd patch-out under normal driving have us think it might benefit from a tire refit.
- Torque steer is our only real beef, but ultimately we like the car well enough to overlook that.
- After about 3.5 gallons, we had driven 124 miles with no special tricks, largely on track for the 500-plus range Ford predicts.

Metro light rail makes an apt companion for our new-tech Ford C-MAX Hybrid SEL. One wiper has huge reach, the other not: fun to watch but only mostly effective. The interior is well appointed and spacious throughout.

FORD C-MAX (CONT'D)

line minivan look of the Prius. Its grille treatment is similar to that on other recently updated Ford products like the Escape, Focus, Fiesta and Fusion.

C-MAX Hybrids come with seven airbags including driver's knee airbag, Advance Trac with roll stability control, and a variety of electronic safety technologies. Those include torque vectoring to better guide the vehicle through corners, and curve control to slow it if the driver enters a corner too fast.

With gas prices shooting up fast, Americans are clamoring for fuel-efficient vehicles, yet it's still unclear whether they have a love affair with gas-electric hybrids. Only the Prius has captured the public, continuing to outsell all other hybrids combined, with a million-plus on the road.

Even with the numerous advantages of a lower price, more power, better fuel economy and being more fun to drive, Ford will have to convince car shoppers that it can match Toyota's perceived quality and reliability. But with a pure utility hybrid that's also the first that's fun to drive, we think C-MAX has hit the bull's-eye and might just give Prius a run for its money. ■

OUR TEST 2013 FORD C-MAX HYBRID SEL

Base price	\$28,200
Equipment Group 302A: Premium audio and nav, hands-free tech package, power liftgate, rear camera, keyless entry/start	2215
White Platinum Metallic Tri-Coat	495
Destination and delivery	795
Equipment group savings	deduct 520
TOTAL	\$31,185



C-MAX Hybrid. With a starting price of \$25,200 for a C-MAX Hybrid SE, or \$28,200 for a C-MAX Hybrid SEL like our test model, the C-MAX is priced some \$1,300 lower than the base Toyota Prius v. And, with fuel economy of 47 MPG city, and an equally amazing 47 MPG highway, it beats the Prius v by three points city and seven points highway. C-MAX also has 50 more horsepower and exclusive technologies such as Ford's hands-free liftgate and semi-automatic parallel parking.

The C-MAX also features 99.7 cubic feet of passenger space compared with 97 cubic feet in the Prius v.

Power comes from a 2.0-liter four-cylinder engine and a lithium-ion battery-powered motor, which replaces the nickel-metal hydride pack previously used in the Escape Hybrid. The new battery is 25 to 30 percent smaller and 50 percent lighter, according to Ford.

Like the new Escape, the C-MAX will seat five passengers in two rows of seats and has a hands-free liftgate, active park assist for easier parallel parking, and the MyFord Touch multimedia control system. The C-MAX Hybrid will also be equipped with SmartGauge with EcoGuide. It displays real-time fuel economy and gauges that help drivers maintain a fuel-efficient driving style.

The C-MAX is built on the Ford Focus platform, at the same Wayne, Michigan assembly plant.

Visually the C-MAX is very similar to the all-new Ford Escape, and in fact they share the same interior with room for five passengers. The C-MAX avoids the border-

FORD ESCAPE (CONT'D)

Ford is also introducing a clever, industry first hands-free rear liftgate, which by using current Wii technology allows you to open it by simply sliding your foot beneath the center of the rear bumper—so you don't have to look for your keys, set packages down or pull a handle when your hands are full.

Ford designers have also improved the vehicle's interior quality: there's a new soft-touch dashboard, the rear seats now fold in one simple motion, and there are substantial improvements to the previously frustrating MyFord Touch system. MyFord Touch houses the climate, navigation and audio controls on an eight-inch touchscreen that's standard on the upper trim levels.

There's also a new optional active park assist feature, enabling the Escape to automatically parallel park itself. That option also includes a backup camera, front and rear proximity sensors, and a blind spot warning system.

Escape offers a choice of three engines, all four-cylinder: a 168-hp 2.5-liter (a carryover from last year), a new 173-hp 1.6-liter EcoBoost, and a 2.0-liter EcoBoost with 237 horsepower that replaces the outgoing 3.0-liter V6. Fuel economy ranges from 21-23 MPG city and from 28-33 highway. Our Titanium AWD test Escape had the 2.0 EcoBoost and was rated 21/28/24 MPG city/hwy/comb.

Ford has dropped the Escape Hybrid, which had been offered for several years. Ford wanted a unique brand that touts its electrification program—their response to Prius—so in addition to the new Focus Electric, they introduced the C-MAX crossover vehicle shown opposite. C-MAX is available with only two powerplants: hybrid and plug-in hybrid, and is built on the same plat-

form as the new Escape.

Ford is changing its trim level nomenclature to S, SE, SEL and Titanium, replacing the XLS, XLT and Limited levels on the outgoing model.

We had a chance to spend some time behind the wheel of the new Escape and found it to have a firmer ride and sportier feel than the outgoing model. It felt stable and sure-footed on winding mountain roads, thanks to the security of enhanced features like torque vectoring control, which helps the vehicle accelerate smoothly through corners, and curve control, which slows the vehicle when it is going too fast into a corner.

We think the new Escape is an excellent, fun-to-drive crossover that will not only maintain Ford's current spot at the top of the small crossover pack, it should steal customers away from other makes' premium and near luxury brands. ■

COMPETITION INCLUDES: Chevy Equinox, Honda CR-V, Hyundai Tucson, Jeep Liberty, Kia Sportage, Mazda CX-5, Nissan Rogue, Subaru Forester, Toyota RAV4, Volkswagen Tiguan

OUR TEST 2013 FORD ESCAPE TITANIUM AWD

Base price	\$32,120
Equipment Group 401A: Titanium tech package, tonneau cover, roof rails and cross bars, HID automatic headlamps, power liftgate, rear parking sensors.....incl	795
MyFord Touch / HD / Sirius/Nav.....	795
Parking Technology Package	995
Destination and delivery	825
TOTAL	\$34,735



LOGBOOK NOTES : ESCAPE

- We liked the prior Escape a lot, so were apprehensive, but once sitting in the driver's seat, who doesn't want one of these?
- Keyless locking had some buggy behavior, and the alarm was triggered by either our pocket or nothing, more than once.
- The audio system, after adjustment, was stronger in the low range than the high, but gave pretty solid performance overall.
- The shifter could use detents, to help it stop in D without ending up in Sport.
- The B-pillar seems visually thinner inside than out, but creates the usual blind spot.
- Our experiences with MyFord Touch include a number of gripes, including slow and incomplete iPod functions.
- The foot-motion-operated tailgate is handy, though at night it could use a light on the button perched high overhead.
- Power and shifts are adequate, ditto fuel mileage. EcoBoost results seem ordinary.
- A Mercedes-Benz GL in traffic prompts a comparison of stature, wheel arches, hood creases and such, leading to a new appreciation of the Escape's styling.
- Doesn't seem tall at the roofline, but does at the hood and beltline. Overall a good size, handling four or five like a sedan. Might make the Explorer seem oversized.
- Could it have been styled more like a small Explorer? Yes. Instead, you could call it a copycat, or you could call it the clear recipient of an obvious trend.
- Some of our test vehicles we love, some not, and some simply become comfortable, useful and attractive enough to keep indefinitely without thinking about it that much. This is that good, or better.

Open everything up and think "Swiss Army Knife": the Ford Escape does deliver utility. Seating space is about the same as C-MAX, but the Escape holds more cargo. We gave it all As on a nighttime dash to Wickenburg.

ADD TO
SHORT
LIST

By Joe Sage



Subaru has always proudly been a bit of a different breed—a little out of the mainstream. But that has not prevented huge success: the brand has a famously devoted fan base. Elsewhere in this issue, you will find the 2014 Subaru Forester: a neat little rig that's part SUV, part turbo racer and all personality. All the more interesting, then, to spend some time with the Subaru Legacy, which turns out to have plenty of Subaru individuality, of course, but also turns out to have evolved into a mainstream option that puts it on the same shopping list as the biggest sellers in the midsize sedan category.

And what a category this is—the most popular in the US, at some 25-30 percent of total sales. (Crossovers are in second place, in the high teens.) Competitors include everything from Ford Fusion and Chevrolet Malibu, to Kia Optima and Volkswagen Passat, Mazda6 and Nissan Altima, Honda Accord and Toyota Camry—and other midsize giants.

Park the wagon out back

Even among that stiff competition—or oblivious to it—the Subaru Legacy has consistently sold well for decades. With its all-wheel-drive foundation, it has been an extremely popular vehicle in such places as Colorado and New England, to the point of ubiquity. A classic iteration in many people's minds was surely the Legacy wagon with a Thule rack, box, skis and mountain bikes on top. The vehicle's position was further cemented when the Legacy Outback wagon came along in the late '90s, a body-clad, heightened, strengthened version quickly echoed by the Volvo Cross Country and Audi allroad. Along the way, the Outback lineup has split off from Legacy. There have been Outback Sport hatchbacks and briefly an Outback sedan. But since 2007, things are pretty clear: Outback has emerged as the wagon and Legacy as the sedan.

And the Legacy sedan is what we're driving here. It's that clarification of names, shapes and functions that has brought us a Legacy you can think of along with all those other top-selling midsize sedans.

Choosing your Legacy

The Subaru Legacy starts as low as \$20,295 for a base model with 2.5i four-cylinder boxer engine. The 2.5i also comes in Premium, Sport and Limited models, reaching a base of \$25,895 for the 2.5i Limited shown here. (Outback wagons are generally about \$3,000 higher than Legacy sedans.) There is also a PZEV (partial zero emissions) \$300 option.

The 2.5i base model is the only one available with a 6-speed manual transmission; all others are outfitted with a DAF continuously variable transmission (CVT), with 6-speed paddle shift manual mode, if you have the urge to surge through faux gears. Fuel mileage is 24/32/27 MPG (city/hwy/comb) for the CVT and drops to 21/28/24 for the manual. The manual has a higher final drive ratio (4.444 vs 3.700).

Two 3.6R models with a six-cylinder boxer engine range from \$25,395 to \$28,895. These are rated at 18/25/20 MPG, but horsepower is 48 percent higher at

256 hp (with 247 lb-ft of torque) and they have a five-speed paddle-shift automatic.

The engine decision is clear: 3.6R models are geared toward power and 2.5i models toward fuel economy.

Wheel time in the Subaru Legacy

Our 2.5i in top Limited trim had the top option package, with [a] a power tilt/slide glass moonroof; [b] a high-res 7-inch voice-activated touchscreen for GPS nav, audio and Bluetooth® connectivity; and [c] Subaru's EyeSight® Driver-Assist System, with adaptive cruise control, pre-collision braking and lane departure warning.

The Legacy is very spacious inside. Ivory tones of our test car's leather seats, pillars and headliner contribute to the feeling, and the greenhouse is big—there is great over-the-shoulder rear visibility, plus ample legroom and easy access. Our logbook repeatedly noted the volume of space inside and the nice cabin experience.

Controls on the center stack are elegant and clear. There are additional controls on the steering wheel—cruise, audio, two stalks, paddle shifters—more on the door, a group on the lower left instrument panel (including an unusual button for the parking brake, which could use a night light), and more on the ceiling, above the mirror, including collision and lane warning controls.

The 173-hp four-cylinder doesn't deliver neck-snapping acceleration, but once rolling had the power we needed, easily clearing freeway bottlenecks. The logbook noted that "we realized we were driving fairly aggressively to see how much power we could squeeze out of this car, then realized we had been having a heck of a good time, with very precise handling and control, as we darted among lanes and tight turns and so on."

The Legacy's speed-sensitive rack-and-pinion steering feels solid and smooth, with none of the disconnect feeling of many electric steering contemporaries.

A growing number of 8-speed automatics (and even some 6-speeds) work hard to create perfect shift points for performance and fuel economy. Even before you get to the first corner you may have shifted 3 or 4 times. With this as reference, we find the CVT enjoyable. We accelerate through a turn, give it more gas and are happy not to have any hunting for a shift point. We thought we'd miss punching it to induce a downshift, but the power was always there within its continuous flow—smooth and consistent. We had a good experience with the Legacy's paddle shift mode, though it will not override you if you forget to shift.

Logbook nitpicks mention widely separated audio power and volume knobs. The center stack screen could use some shading, while its finish easily falls victim to fingerprints, two issues that can impact the backup camera in particular. Crash alert and lane warning alarms were hypervigilant, alerting us even at stop signs or on routine pavement markings at times.

At night, a small upper instrument panel showing time, temperature and miles to empty, along with the center stack, main binnacle and other controls, with their relativity of color, light and placement, all come together very well. The instruments have a level of inclusion yet simplicity on a par with some of our



favorites. The 440-watt 9-speaker Harman Kardon premium audio system includes a 7-channel equalizer and is adjustable to deliver more than decent output. This ensures that our driving experience rocks, day or night.

Choosing your next midsize

All Legacy models offer a considerable level of style, function and amenities, especially well executed in our top-of-the-line (among 2.5i models) Limited.

If you're choosing among all those other midsize sedans you've been so used to and hadn't thought about the Subaru Legacy, you will find it an intriguing option.

We might fine-tune the body styling a little bit—it's a little awkwardly tall, but that gives you fabulous interior headroom and overall volume—and we might make a couple of changes in minor features, as with any. But behind the wheel is where it counts, and behind the wheel, this car is a clear winner. Styling has started to get a little sexier—and the car is a great provider. Once you spend some time in the Legacy, it's easy to see how the typical Subaru owner moves in and never wants to move out. And—all-wheel drive is standard. ■

SPECIFICATIONS

ENGINE	2.5L 4-cylinder boxer
HP	173
LB-FT	174
DRIVETRAIN	Active AWD with electronically managed continuously variable hydraulic transfer clutch
TRANSMISSION	CVT with 6-speed manual mode and paddle shift
WHEELS/TIRES	17" alloy / 215/50R17
TRUNK (CU.FT.)	14.7
WEIGHT	3427
MPG (EST)	24/32/27 (city/hwy/comb)
FUEL TANK	18.5 gallons
FUEL	regular unleaded gasoline
BASE PRICE	\$25,895
OPTION PACKAGE	Moonroof + Navigation System + EyeSight® System.....\$3,940
DESTINATION	\$770
TOTAL	\$30,605

How does a one add up?

By Joe Sage

You can arrive at the BMW X1 a couple of ways. On the one hand is the utility path. It has been some 14 years since BMW rocked the world by adding an SUV to their lineup, the X5. (BMW prefers SAV, for Sports Activity Vehicle, but we will use "utility" here as the rest of the world does.) Known for performance sedans and roadsters, this was a heretical move to some—entering the turf of Hummer and Ford Explorer—though BMW did own Land Rover at the time. With Porsche joining this heresy a few years later, the notion that this was unusual largely faded away.

The X3 next entered the market in 2003, as the craze toward a bit of downsizing and a new label—CUV or crossover utility vehicle—came into use for a wide variety of SUV-like, wagon-like and other-like vehicles.

It took about the same amount of time for BMW to next bring us the X1, which launched in 2009 in Europe. As gas prices climbed and sensibilities shifted toward ever smaller vehicles in North America, the X1 arrived in

Canada in 2012 and the US this year.

The other path to the X1 is via BMW's numerical lineup of sedans, coupes and convertibles. After decades of 3, 5 and 7 Series, plus a luxe performance 6 Series rejoining the group a decade ago, the same downsizing trend brought us the BMW 1 Series, as a coupe and a convertible. In Europe, there are also both 3-door and 5-door versions: hatchbacks to some or wagons to others.

The X1's "X" identifies it as the newest and smallest in the utility group. But it is almost a dead ringer for the European 1 Series 5-door wagon (though the X1 platform derives from the X3, in turn derived from the 3 Series, while the 1 Series car platform is a front-drive-capable setup that can be shared with MINI).

So we have some "X" DNA in the chassis, which itself carries car DNA, and lots of car DNA in the body. You could make the case that this works out to about 75 percent car and only 25 percent "X."

When we first met the X3, years back, we were



struck by how easily you could option your way up to a vehicle that cost more than a base X5. From both style and handling angles we figured we would forgo a few options to have the bigger sibling for the same price.

Today we see similar overlap, and similar divergence, with the new X1—somewhere between a 1 Series wagon not sold here and an X3. Is it a (not very) tall wagon? Or, since it bears the X name, is it more a very wagonlike crossover? The 1 Series coupe looks stubby to us, but this is visually longer (though it also reminds us a little of a very small Civic wagon from the '70s).

It strikes us that perhaps this shouldn't be a "1" at all, but rather might be tending toward a size "2."

Ironically, BMW has now announced that its 3 Series coupes and convertibles will become a 4 Series (somewhat following the pattern of the 5 and 6 Series). And rumors have it that a 2 Series Gran Coupe is in the works.

It evokes Audi's evolution: so many models, hitting every number, that they can't help but start to overlap in size, function and price. There's nothing inherently right or wrong with this; it just makes it a little harder to determine whether one car's niche scratches your itch.

Lots of technology per pound

This small car has one of the thinner owner's manuals we've seen in awhile—just over 200 pages. This may indicate they think their controls are more intuitive than they are, as in Apple's trend of not providing manuals at all, for that reason. Here, that's not the case. And, lest anyone think we're too dim to understand them, we say we're smart enough to write the missing 200 pages.

Our logbook noted issues with the center stack interface, lock and latch operations and so on. Audio settings were visited quite a few times, to little avail.

But what we noted most were Auto Start-Stop and shifting, along with related engine and even what

should be simple lock and lighting functions.

Our X1 is the sDrive model, meaning it has rear-wheel drive. The xDrive alternative has all-wheel drive. That would be our purchase preference, for its greater utility and general appropriateness to the X name.

We noticed the car's shifts right away, a rapid sequence from its 8-speed automatic. Our logbook notes that "rather than losing power on each shift, as these sometimes do, you can feel a little spurt on each one. Each has the presence of a real shift: rapid and clean." On the freeway at a later time, though, we noted these otherwise welcome power bursts could create a lurch when changing gears. Spurts, bursts: good. Lurches: not.

We also noted that the shift lever itself was highly sensitive. Any tendency to rest a hand on it could induce shifts—the cholla "jumping cactus" of shift levers, we noted. On the other hand, slapping that shifter from R to D in a parking lot did not always take, on the first try.

When we pulled over to make our first logbook notes, the Auto Start-Stop kicked in, killing the engine until further notice. This is a feature common to the current crop of BMWs, with a noticeable and disquieting stop and a more noticeable and more disquieting restart. We learn the ways to override this, with feathering of the pedals and so on, but we never warm up to it. We like it least of all in this common scenario: pull in the driveway, put it in park, put our sunglasses away, reach for the power but-

2013 BMW X1 sDRIVE 28i

- 2.0L 4-cylinder TwinPower Turbo direct injection, valvetronic, steplessly variable timing
- 240 hp; 260 lb-ft from 1250-4800 rpm
- Auto Start-Stop
- 8-speed Steptronic automatic with Sport and Manual modes, Adaptive Transmission Control and ECO PRO mode
- DSC, Brake Drying, Brake Standby, Start-off Assistant, Brake Fade Compensation, Brake Energy Regeneration, ABS with Dynamic Brake Control, BMW Advanced Safety System
- Rain-sensing wipers, foglights, roof rails, leather-wrapped 3-spoke multifunction steering wheel
- Bluetooth, AM-FM-CD-MP3-HD, iPod-USB

BASE PRICE.....	\$30,650
M SPORT LINE.....	\$3000
LIGHTING PACKAGE: xenon headlights, ambient lighting, auto high beams	\$1200
PREMIUM PACKAGE: keyless entry, panoramic moonroof, auto-dimming mirrors, power front seats with lumbar support, universal garage door opener	\$3950
SERVOTRONIC.....	\$250
SATELLITE RADIO ONE YEAR.....	\$350
DESTINATION.....	\$895
TOTAL.....	\$40,295

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ton to shut it down, and all that does is restart it. Was it already off? Could we have just walked away from the car at that point? This is disquieting on many levels.

In stop-and-go freeway traffic, we liked it even less. And in a crowded parking lot, jockeying to find a spot and let others come and go, we liked it least of all.

Our logbook says we "hate to be focused on nothing but this Auto Start-Stop, as though it's dang near the sum total of our experience with this car, but it's dang near the sum total of our experience with this car." We wish this feature could be a secondary mode, an optional setting—like ECO—rather than mandatory. Surely it is needed to achieve target fuel economy, but then ECO could be in the same category.

But we know one simple way to bypass it: use the Manual shift mode. As an 8-speed, this may seem like too many gears to shift, but we noted better performance, to our taste. You do have to remember you changed to M, though, as the system won't upshift for you. The Steptronic transmission also offers a DS (Drive Sport) mode. Pushing the joystick-like shifter to the left brings this designation up in the instrument cluster. It's a fully automatic program, like D, but mapped more aggressively. We like it. But we like M best, to kill the Auto Start-Stop.

We could eke out some pretty decent performance from the 240-hp 4-cylinder turbo. Caught in a slow jam of another 1 Series, a 7 Series and a classic SUV, we nailed it, passed the 1 and the SUV, and roared onto the freeway with the 7 Series, "with a nice little growl and all the performance we needed at that moment."

The suspension felt very firm, and we liked that, although it could be a hair too firm for some people. (Our car had stock 18-inch tires and wheels, and 19-inchers are available, which would only tend to be firmer.) The car was very reactive to what lay beneath, and in some complex changes of surface shape, texture and material, we had to hang on tight.

Buying in to the BMW X1

As you can see in the sidebar on the previous page, our \$30,000 X1 quickly became a \$40,000 X1 before it went out the door. Yet missing from ours are a Driver Assistance Package (\$950 for rear camera and park distance control) and a Tech Package (\$2500 for nav, voice command and BMW Assist with Bluetooth). We looked into these because our audio was weak, in both sound quality and interface, and we wondered what else was available. That would be a freestanding Harman Kardon surround sound option for just \$875. Without even hearing it, we would say yes to that. Do it all, though, and you're looking at a \$45,000 quite small SUV. Or go for the M Sport model—not an actual M, but M trim—and you can top \$55,000 with extended warranty.

On the plus side, if you want the most reasonable little BMW utility vehicle you can possibly have, this should be it—at least the basic car and format. Even optioned up to \$40,000, ours had a manual handbrake, no heated seats and minimalist audio. We might suggest staying toward the base model and skipping some of the finicky tech implementations. If you have your mind set on a new BMW and are on a budget, the X1 is a good place to start. It's just that there's an awful lot else you can get, including a used bigger BMW. ■

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THE INSIDE TRACK: BRIEFS & RUMORS

■ Ten years after the PRE-SAFE® anticipatory occupant protection system had its world premiere in the **Mercedes-Benz** in fall of 2002, PRE-SAFE® is now available in 14 series across the model range, from A-Class to S-Class. The system is now able to trigger anticipatory measures in up to eleven hazardous scenarios. Almost 60 percent of Mercedes-Benz passenger cars delivered worldwide in 2012 were fitted with PRE-SAFE®.

■ **Jeep** is reported to be on the verge of a multibillion-dollar overhaul that will expand its product range, especially overseas. Senior partner Fiat plans to expand the Jeep lineup from four to at least six by 2016. Several future Jeeps will be built on Fiat platforms, according to industry sources, and some will share their underpinnings with companion models from Fiat and its premium European brands, Alfa Romeo and Maserati. The Jeep name has some of the highest brand recognition in the world, and Fiat wants to establish it as one of their core global brands.

■ **BMW** is developing a new two-man bobsled for use by Team USA in the Sochi (Russia) 2014 Olympic Winter Games. In collaboration with USA Bobsled & Skeleton Federation (USBSF), BMW has examined the design and performance history of existing two-man sled platforms—one of which has been the default bobsled of Team USA for more than 20 years. They are pairing lightweight materials, aerody-

BMW two-man bobsled



namics and chassis dynamics to leverage the energy output of the two-man team. While Team USA won a gold medal in the four-man bobsled event at the Vancouver 2010 Olympic Winter Games, the two-man gold has eluded them since 1936.

■ Infiniti is reported to be renaming its entire product line for the 2014 model year, using “Q” for every car and “QX” for every crossover and SUV. This standardi-



zation is part of a move toward broader globalization. The current lineup of Infiniti sedans, coupes and convertibles—the G sedan (their biggest seller), G coupe and convertible, and M—will become the Q50, Q60 and Q70, respectively. On the crossover side, the EX will become the QX50, the FX crossover will be the QX70, and the big QX56 will become the QX80. And the QX60? That name will be plant-

ed on the recently new JX—their second-biggest selling vehicle in the US—on the heels of its introductory campaign as the JX, an admitted challenge. (The company reportedly even considered naming all its cars “J” and all its crossovers “JX.”)

■ car2go North America LLC, a wholly-owned subsidiary of Daimler North America, continues to expand by bringing its carsharing service to Seattle, with a net-

work of 330 car2go edition **smart** fortwo vehicles, available for shared use 24 hours a day, seven days a week.

■ Dr Dieter Zetsche, Daimler AG chairman and head of **Mercedes-Benz** cars, has personally delivered a new Pope-mobile to Pope Benedict XVI in Vatican City, continuing an 80-year tradition. The Pope-mobile is based on a Mercedes-Benz M-Class, with a special-purpose body built specifically to the Pope’s needs.

■ **Brembo**, long an OEM supplier of high-performance brakes for BMW, now officially enters BMW’s accessories catalog. Using the car configurator, a customer can order Brembo aluminum fixed brake calipers with four front and two rear pistons in BMW blue as a factory-installed option for their 1 Series or 3 Series. Or, after purchase, they can order a 4-piston, aluminum fixed brake caliper at the front and a 2-piston caliper at the rear, in yellow, red or orange. In both cases, the calipers bear the M BMW logo.



■ The larger, lighter and more powerful sixth-generation **Maserati Quattroporte**, unveiled at NAIAS in Detroit, netted a winning bid of \$340,000 during a charity auction at the Naples Winter Wine Festival (retail pricing has not yet been announced). The lucky winners, already owners of a fifth-generation Quattroporte, will be among the first to take delivery of their new Italian flagship in the US. The event benefits underprivileged and at-risk children in Collier County FL.

■ **Auctions America** concluded its 2012 season with an auction in Auburn, Indiana for the non-profit National Military History Center. The event featured more than 80 vintage military vehicles and over 100 pieces of rare war memorabilia, all at no reserve. The five-hour sale featured the largest group of full- and half-track military items ever offered at public auction, generating \$2,967,650 in sales—with bidders from 34 states and 19 countries. The highest price was for a rare WWII Daimler-Benz DB10 12-ton Half-Track Primer Mover—among the scarcest of all German equipment—at a remarkable \$200,000 hammer price. Other vehicles included a 1940-41 Hanomag S.P.W. Ausf. C SdKfz 251/1 Armored 3/4-Track at \$160,000 and a 1940 Horch Type Efm 4x4 Cross-Country Personnel Car, which tripled its pre-sale estimate at \$150,000. A 1942-45 GMC DUKW-353 6X6 Amphibious Truck sold for \$97,000 against a pre-sale estimate of \$50,000-75,000. Vintage motorcycles also performed extremely well, such as a limited production 1942 Harley-Davidson 42XA for \$40,000 and a 1942 Harley-Davidson UA Motorcycle with Sidecar for \$38,000.

■ General Motors plans to move Chevrolet **Camaro** production from Oshawa, Ontario, to Michigan in 2015, for the next-gen 2015 or 2016 model. The new Camaro will be built at GM’s Lansing Grand River Assembly Plant, allowing GM to consolidate production of the rear-wheel-drive Camaro with the rear-drive Cadillac CTS and ATS.

■ The American Motorcyclist Association says riders who use the popular Johnson Valley Off-Highway Vehicle Riding Area in Southern California may not lose most of the area to a Marine base expansion, as had been expected. The military is now barred from spending money on expanding the Twentynine Palms military base into Johnson Valley until it completes a report on how that would affect off-highway riding, under a new military spending authorization bill.

■ **Nissan** has found a great way to celebrate two years of Leaf sales, as they announce a new US battery plant—the largest lithium-ion automotive battery plant in the US. The facility, adjacent to Nissan’s existing vehicle assembly plant in Smyrna, Tennessee, will make battery components for the ramp-up of US production of the all-electric, zero-emission 2013 Nissan Leaf. This plant is one of just three of its kind in the world operated by a major automaker. The first batteries produced at the plant have completed a required aging process and are ready to receive their first charge. Adding production of the Nissan Leaf and the battery has created over 300 new US manufacturing jobs. The facility is ultimately capable of producing modules for up to 200,000 batteries annually—for the all-electric Nissan Leaf and for future vehicles that may be added to the portfolio. As production expands to fill demand, operations

Nissan plant, Smyrna TN



could add up to 1,000 additional jobs. Since December 2010, Nissan has delivered more than 18,000 Leafs to US customers and over 46,000 worldwide, making it the most successful 100 percent electric vehicle in history. ■



UPCOMING FEATURES

2014 Chevrolet Impala launch



Hyundai Santa Fe launch



Porsche Cayenne GTS



PIR : NASCAR including the first NASCAR Mexico

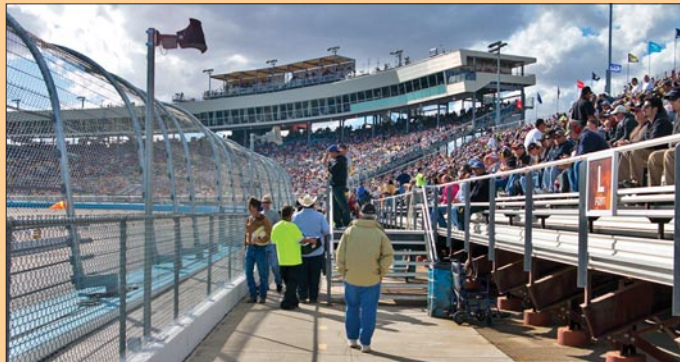


Photo: Joe Sage

Bentley Continental GT Convertible



Audi A8L 3.0T quattro



Goodguys Spring Nationals



Kia Soul



Photo: Joe Sage

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