

# 13 - Radio and the Automobile of the Future

**iBiquity forecasts a record 5.4 million HD Radios will be sold in 2013.** Digital radio developer iBiquity projects HD Radio receiver sales will jump 63% this year, forecasting 5.4 million units will be sold. That compares to 3.3 million receivers that entered the market last year. CEO Bob Struble says the majority of digital radios will come as part of a carmaker's digital dashboard. "Almost 30% of new cars will ship with HD Radio receivers in 2013 and by next year, there won't be an auto dealer in America that does not have HD Radio-equipped vehicles on the lot," Struble says. Between 2010 and 2013 annual sales have grown an average 50% per year. In a blog post Struble forecasts similar results for the next several years. "It sure looks like that famous inflection point experienced by many successful technologies, where sales trundle along for several years and then break through and head straight north," he says. Growing sales numbers are noteworthy, Struble says, because very few over-the-air technologies actually break through. Some broadcasters are still a bit touchy about investments in AM stereo that didn't pan out while a more recent example is 3D TV, which hasn't caught on with consumers. ESPN recently stopped offering a compatible 3D TV signal. After slow initial adoption, iBiquity can boast of about 15 million HD Radio receivers currently in use. Struble says it's understandable that the pace isn't as fast as many would like. "But with a lot of effort and patience, we are getting there," he says.

**Arbitron: 3.6 million listen to HD Radio sub-channels each week.** One of the most enticing elements of digital radio so far has been the ability to split an FM signal to create side channels that can feed a translator. Arbitron data shows that as of last autumn nearly 3.6 million people listen to more than 500 HD3, HD3 or HD4 channels. That's an increase of 60% compared to fall 2011. "A big chunk of that listening is taking place on analog translators," iBiquity CEO Bob Struble says. In a blog post he points out that owners like Cromwell Group are using the HD2-translator combination to attract sizable numbers. Its Decatur, IL urban AC "Magic 98 FM" is transmitting off of WYDS and in the spring Arbitron ratings the HD-translator combo pulled a top-rated 9.4 share (12+). "Real listenership is starting to build," Struble says. But for many broadcasters the pace of digital radio adoption has been far too slow and making the investment in iBiquity's technology doesn't make sense until there's 25 million or more radios in use. An *Inside Radio* survey found that nearly one-in-three readers think HD Radio won't reach a tipping point in consumer use until 2016 or later. And nearly four-in-ten were even less optimistic, predicting that day will never arrive.

**Toyota Scion first to offer touchscreen audio as standard.** In case there was any doubt that the digital dashboard is here to stay, Toyota has become the first automaker to offer a touchscreen audio system across an entire vehicle line as standard equipment. Buyers of the 2014 Scion will get a 6.1-inch touchscreen that includes HD Radio. The audio system will also include a CD player and an input so drivers can connect their smartphone or iPod. "A standard touchscreen audio system across the entire Scion lineup stays true to the brand's innovative nature and responsiveness to the desires of its youthful drivers," Scion VP Doug Murtha says. Drivers willing to fork over an extra \$1,198 will get the Scion BeSpoke Premium Audio system. Most notably is it includes Harman's Aha Radio dashboard platform with access to 30,000 free audio stations, including content from such providers as CBS Radio News, NPR, Educational Media Foundation, Slacker and AccuRadio.

**Survey: Nearly half of public radio listeners are time-shift programming.** Whether you call it audio-on-demand, podcasting or time-shifted programming, public radio listeners are doing it. A Jacobs Media survey finds nearly half (46%) of public radio users choose for themselves when to consume the programming. For many public outlets, it's validation of a strategy to create specialty on-demand programming targeting techies, foodies and even fans of Alec Baldwin, who hosts a podcast for New York Public Radio. Baby Boomers still make up the bulk of the public radio audience and so 83% of listening

still goes to traditional FM/AM over-the-air signals. But Gen X and Millennial listeners are consuming public radio on their own schedule. Six-in-ten of those younger demos stream content at least once a week. Already 16% of public radio consumption is done online. It's also getting easier to do with six-in-ten public radio fans holding a smartphone and half owning a tablet. "Mobile and mobility continue to have steep upward trajectories while on-demand programming is becoming even more popular," Jacobs Media president Fred Jacobs says. The survey also finds that half of public radio listeners can now plug their smartphone or mp3 player into their dashboard. "This extremely well-educated radio audience is actively accessing information from a growing variety of media sources, and changing the way that media outlets provide their content," the report says. The results are based on an online survey conducted April 15-May 13 among listeners to 56 public radio stations.

## Streaming Apps Offer Alternative to Car Radio

By Keith Barry

August 5, 2013 10:59AM



**Car connectivity systems are offering listening options beyond terrestrial radio, but they have been slow to catch on. Among Internet radio services, Pandora has the broadest in-car audience by far, with most new in-car infotainment systems offering Pandora connectivity. Pandora developed the early lead because it's simple to use.**

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»If you're shopping for a new car, there's a good chance that it will come standard with a dashboard infotainment system that offers dozens of ways to listen to music, podcasts or audio books. But if you're like most drivers, you're still tuning in the old-fashioned way.

Americans are increasingly listening to Internet radio -- 45% of adults do so at home or in the office, according to ratings service Arbitron. But that trend isn't following listeners into their cars, where 84% of drivers still listen to old-fashioned AM and FM radio stations.

That may come as a surprise, considering that most smartphone users have downloaded streaming audio [apps](#) such as Pandora, Stitcher, Slacker and TuneIn, and most new cars offer a way to integrate those services into their infotainment systems.

**The key reason radio remains popular is simplicity, according**

to General Motors' Tim Nixon: The second you start the car, you have instant access to music, local news, [traffic](#) 📶, weather and sports.

Nixon, the executive director of GM's Global Connected Consumer unit, has been tasked with making it as easy to connect to a streaming-audio service as it is to turn on the local NPR affiliate or Top 40 station. "It's got to be as easy to use as switching from AM to FM is today. That would be our ultimate goal," Nixon said.

Currently, most in-dash systems rely on a smartphone with a data plan to stream audio, and it interferes with the user experience. "You've got to set up the [device](#) 📶 and pair it," said Nixon. "We make it as easy as we can ... with the minimum number of steps, but there's some people that maybe are a little bit put off by that, and maybe aren't completely aware of what their choices are with that solution."

Among Internet radio services, Pandora has the broadest in-car audience by far, with most new in-car infotainment systems offering Pandora [connectivity](#) 📶. According to company representatives, Pandora connects with 2.5 million listeners across more than 100 models of vehicle.

Pandora developed the early lead because it's simple to use, according to Roger Lanctot, an automotive analyst at Strategy Analytics. It offers a one-touch interface and creates playlists on the fly.

But even the developers at Pandora are in search of a more seamless solution. "What we think about from a product perspective in the car specifically is quite honestly the FM model: Get in, start the car and music starts playing," said

Geoff Snyder, Pandora's director of automotive business development. [\(continued...\)](#)

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The process will become much more streamlined as cars start to come with built-in [wireless](#) 📶 Internet -- drivers won't have to tether their smartphones to the infotainment system to get Internet access.

**In February, GM became the first major automaker to announce that most of their 2015 models will offer embedded 4G 📶 modems for constant connectivity -- eliminating the need to pair a phone or wait for a connection. That could put online radio on par with its terrestrial counterpart.**

**Reaching that goal may take the better part of a decade, since cars have long life cycles, and most of the vehicles on the road today have no way of connecting to a streaming-audio service.**

**"This is a long-term play, because it takes time to get into these cars, but it's going to be worth the time and energy," said Pandora's Snyder.**

Even though there will be more competition, don't expect

local radio stations to go away.

"There's segments of our customers that want the traditional sources and segments that want the newer sources," said Nixon. "We're going to be watching this closely to see what people want, but I think we're going to see a continued diversification."

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## David Sedgwick

### Automotive News

August 5, 2013 - 12:01 am ET

Automakers are rushing to add Internet radio apps such as Pandora, iHeartRadio, Spotify and Aha to their infotainment systems.

Although Internet radio lags its more established rivals, it has gained a foothold among motorists, according to a February survey by Arbitron Inc. and Edison Research.

Twelve percent of respondents said they have listened to Internet radio in their vehicles. That compares with 15 percent for satellite radio, 63 percent for CDs and 84 percent for AM/FM radio.

But automakers appear eager to add Internet radio, and the nation's radio stations are fueling the trend by streaming content on the Web.

"This is one of the hottest topics in the radio business," said Ed Cohen, Arbitron's vice president of measurement innovation. "It's like the Wild West. It's way too early to declare a winner."

Pandora has a clear lead in the Internet radio race. According to the Arbitron/Edison Research survey, 47 percent of smartphone owners have downloaded the Pandora app. Fifteen percent downloaded iHeart- Radio; 6 percent got Spotify; and 5 percent obtained Aha.

Smartphones receive Pandora's signal from the Internet and channel it to the vehicle's infotainment system.

In addition, some automakers include Pandora's app in their infotainment systems, so motorists can use the cockpit controls to select Pandora stations.

Twenty-three car brands have integrated Pandora into their infotainment systems, and Pandora boasts that through June, it had 71.1 million active listeners on all devices.

Pandora offers a choice of free service with commercials or a commercial-free service for \$3.99 a month.

The company built its listening audience, which attracted automakers eager to accommodate those listeners.

Harman International's Aha Mobile Inc., which offers 30,000 stations featuring music, talk shows, news and comedy, has taken a different approach.

"We're a little bit like cable TV," says Rod MacKenzie, vice president of automotive business development. "We are not the branded content; we are trying to be the pipe that brings it into the car."

He says his company acts as an umbrella for a variety of infotainment apps, then updates them as needed. This frees automakers from having to handle software updates, and motorists from having to visit dealerships to get those updates.

MacKenzie says Aha also can help automakers analyze vehicle and customer data to determine what motorists listen to and when.

### Who's on top?

Pandora dominates the Internet radio segment, according to an Arbitron survey. Here's the share of smartphone owners who downloaded each app.

**Pandora:** 47%

**iHeartRadio:** 15%

**AM/FM stations:** 9%

**Spotify:** 6%

**Aha:** 5%

**Other:** 9%

**Source:** Arbitron and Edison Research, February 2013 survey

Automakers could use that information to design apps and services that would appeal to motorists, says analyst Roger Lancot of Strategy Analytics.

Aha and TuneIn are the Internet radio providers best positioned to help automakers do this, Lancot says. "If the customer agrees to share his information, they would have the ability to turn the car into a moving customer clinic," he says.

Aha, which Harman acquired in 2010, has signed up Acura, Chrysler, Ford, Honda, Porsche, Scion and Subaru.

But Aha's MacKenzie realizes the challenge ahead. "The 800-pound gorilla is still AM/FM radio," he says. "I think we are going to see a transition. But how long it takes, I wouldn't care to judge."

## Internet radio

### A GROWING NICHE ...

Share of smartphone owners who have listened to Internet radio on their vehicle's audio system

**2010:** 6%

**2011:** 11%

**2012:** 17%

**2013:** 21%

### ... WITH MANY CHOICES

Share of motorists who have used various audio sources in their vehicles

**AM/FM radio:** 84%

**CD player:** 63%

**MP3 player:** 29%

**Satellite radio:** 15%

**Internet radio:** 12%

**HD radio:** 3%

Source: Arbitron and Edison Research, February 2013 survey

## GM Rolling Out More Vehicles With HD

7-31-13

iBiquity says two additional GM vehicles are now available with HD Radio Technology. The 2014 Chevrolet Silverado and GMC Sierra pick-up trucks are now at dealerships offering the expanded audio features of digital AM and FM broadcasts delivered with HD Radio Technology. The Silverado and Sierra join a number of other GM vehicles with HD Radio Technology that are already available at dealerships including, the Chevrolet Traverse and Impala, the Buick Enclave, the Cadillac ATS, CTS, SRX, and XTS, and the GMC Acadia.

## How self-driving cars could change the future of marketing

July 22, 2013 - 2:32 pm ET

Self-driving cars may be a long way from becoming part of daily life, but people are already dreaming up futuristic ways for restaurants, retailers and other businesses to reach consumers -- potentially a dramatic transformation of the marketing and advertising landscape.

Imagine, for example, a Web campaign in which a retailer at a mall sends a self-driving vehicle to a consumer's home, gives the consumer a ride to the store and then a ride back home.

Or, say, a couple is looking for a new restaurant for dinner. One Web search later, and the car gives them a ride to the restaurant.

There are "all kinds of interesting business models that I foresee coming out of self-driving vehicles; that includes doing shopping and e-commerce, including even having a free ride," said Thilo Koslowski, an analyst at Gartner Inc., a technology research firm in Stamford, Conn.



It's a future in which autonomous vehicles become access points for eager brands, possibly leading to new revenue streams for automakers -- in cooperation with advertisers and network providers such as AT&T -- that could profit from data collected from passengers.

And then there are openings for players such as search giant Google, which has logged more than 500,000 miles testing its self-driving technology, to make money through location-aware search content and the automated driving software itself.

Google's self-driving technology will know where a person is driving, how fast he's moving and what direction he's heading, which could open pathways for businesses to take advantage of predictive search functions.

Integrating Google Now -- a voice-activated personal-assistant app that uses search and location history to make suggestions -- with a vehicle could help a company such as Starbucks, for example, connect with customers.

The chain of coffee shops could have a data feed available that lets people know whether nearby locations are busy -- allowing them to route the automated vehicle to the desired spot, said Mark Boyadjis, an analyst at research firm IHS Automotive.

So should you expect Google to partner with McDonald's and suggest its restaurants to motorists in self-driving cars every time a restaurant is near?

Boyadjis said no because that would go against Google's mission to provide unbiased search results.

"That gets to the sticky edge of pushy advertising, which Google doesn't want," Boyadjis said.

### **Advertising paradigm**

Toyota Motor Corp., focused on developing active-safety systems, hasn't thought much about potential changes in the advertising world, a spokeswoman said.

The automaker unveiled its active-safety research vehicle, based on a Lexus LS, at the International Consumer Electronics Show in Las Vegas in January. The vehicle is outfitted with "sensors and automated control systems to observe, process and respond to the vehicle's surroundings," according to the company.

"We haven't given much consideration to how a self-driving vehicle changes the advertising paradigm we're currently operating in," said Cindy Knight, a Toyota spokeswoman, in an interview. "Mostly, we look at it from a safety standpoint and how we can improve the safety of our current vehicles by developing these driving support systems."

Meanwhile, Audi spokesman Brad Stertz said autonomous driving "as a fully formed concept" is still a decade off at least, so it's too early "to focus in on specific plans or opportunities."

Audi was granted a license to operate autonomous vehicles on public roads in Nevada, the automaker announced in January.

A Google spokesperson said the company doesn't have anything to share at the moment about potential advertising opportunities stemming from automated vehicles.

Boyadjis of IHS said: "They're an ad company. That's where their bread and butter is. That's a core reason for them to do almost anything."

### **Vehicle ownership**

Although Koslowski said he hopes advertising within self-driving vehicles doesn't turn into spamming, he foresees scenarios in which people would accept sales pitches if they get services at discounted rates or even for free.

This is the same model seen on Pandora Internet Radio, which has a free version with advertisements and a premium ad-free offering.

For instance, a person could summon a vehicle to take her somewhere for free, but she'll have to sit through some advertising she can't turn off.

Going even further, Koslowski thinks the traditional vehicle-ownership model could be transformed.

It's possible that, instead of buying a vehicle, consumers could sign up for access to an autonomous vehicle program that provides a "personal transportation access solution," Koslowski said.

He sees an ecosystem business model in which automakers, advertisers who want to reach customers in a vehicle and network operators such as AT&T come together and generate revenues through data collection.

"All of these things have to come together so we can figure who gets what share of the monetization opportunity," Koslowski said. "If you do this right, and the customer signs on for 10-year access to an autonomous vehicle program, I could imagine that the benefit you get from the data collecting and the opportunity to get to interact with the customer will pay for the cost of the vehicle."

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**Radio has a new front in the war for control of the dashboard.** An announcement this week by Sirius XM Radio and AT&T that they've inked a deal to

begin offering telematics and other services to Nissan cars is a new front in the battle for the dashboard. Broadcast radio has seen the satcaster as a rival for listeners over the past decade, but looking forward the two may increasingly be competitors for connected car services. As a single company that's the sole satellite radio operator, Sirius XM is seen as having an advantage of moving quickly in the space. But former FCC chairman Mark Fowler, now an HD Radio evangelist as head of tech development company Digital Power Radio, thinks FM/AM has its own set of advantages. "If broadcasters get their digital signal right, then they're going to have the most powerful and reliable signal into the car with the widest range," he predicts, adding, "They'll also be able to get into buildings and handsets, places that satellite radio can't go." Fowler says that while the industry has been hyper-focused on getting FM into smartphones, technology such as Emmis' NextRadio app could also help broadcast radio develop a digital two-way connection in the car. But it requires stations to make an investment in digital radio so the signal coming into the dashboard isn't just analog FM. Fowler of course has a vested interest in the upgrade, believing his company's technology will help make current HD Radio signals reach even further. For now, Sirius XM has the space to itself. It says Nissan drivers will get a "comprehensive set of telematics, information and entertainment services" from the combination of satellite and cellular networks. The list of offerings will likely grow down the road.

**Forecast: Digital dashboards to increase sevenfold over next five year.** The connected car is just starting to pull out of the driveway. But during the next five years there will be an almost sevenfold increase globally in the number of new cars equipped with factory-fitted mobile connectivity, according to a new report by research firm SBD. Conducted for mobile trade group GSMa, the forecast calls for in-car infotainment services to be supported by 32.1 million cars sold in 2018, compared with 4.3 million in 2012. The largest growth will be for so-called embedded systems, such as BMW ConnectedDrive and GM Onstar, where both the connectivity and the intelligence are embedded into the car. SBD forecasts almost 36 million new cars will be shipped globally with embedded systems by 2018 — 31% of the total cars shipped in that year. That's up from 5.4 million in 2012. Another 21 million vehicles sold in 2018 will be fitted with so-called smartphone integration systems, such as Ford Applink or Toyota Entune, which enable viewing and interacting with apps running on the driver's smartphone on a screen in the car. This year 1.9 million cars shipped with smartphone integration. SBD expects 10 million cars sold in 2018 will be fitted with less popular tethered solutions, up from 2.6 million cars in 2012. In tethered systems, like Mercedes Command, apps run using the in-car computer, rather than a smartphone, but use the owner's mobile phone for connectivity.

**Selling advertisers on the connected car is still in the slow lane.** The opportunity to flash an advertisement to a driver as they pass a store or restaurant is one of the great marketing upsides of a connected dashboard. But the focus for now is largely on building a technology backbone and an audience. As Pandora works to build scale, drivers will continue to receive it commercial-free through at least January 2014, director of auto business development Geoff Snyder told a CE Week audience yesterday in New York. But the webcaster is thinking about how to sell ads against those users. Snyder said the current plan is to use the ZIP codes provided by those who register, not GPS-specific data. Pandora's focus in the meantime is

snatching local ad dollars from broadcast radio. “That’s a huge opportunity for us to really attack that radio paradigm,” he said. TuneIn VP Carl Rohling sees geo-location as the sweet spot for web radio in the car. “It opens up a whole slew of advertising opportunities if you know where someone is based and what type of device they’re on — it becomes a lot more valuable for ad targeting,” he points out. TuneIn has disclosed little about its advertising plans, but it apparently includes ad insertion. Rohling said the online audio aggregator plans to start serving local ads to listeners tuning into an out-of-market station. “We’re capable of doing it today,” he said, but added it will hold off until it has more in-car users to attract marketers’ attention. “With radio advertising it’s all about scale [so] there needs to be growth before you can go out and get radio buys on a local basis,” Rohling said.

The new 2014 Honda Odyssey, equipped with HD Radio Technology, arrived at dealerships today. Honda announced on June 25th that the technology would become available in the vehicles. HD Radio is or will be available as a factory installed feature from 33 automotive brands including Acura, Audi, Bentley, BMW, Buick, Cadillac, Chevrolet, Dodge, Ford, GMC, Honda, Hyundai, Infiniti, Jaguar, Jeep, Kia, Land Rover, Lexus, Lincoln, Mazda, Mercedes-Benz, MINI USA, Mitsubishi, Porsche, Ram, Rolls-Royce, Scion, SRT (Chrysler), Subaru, Tesla, Toyota, Volkswagen and Volvo

**As radio gets visual in the dashboard, the average glance is less than two seconds.** The digital dashboard is evolving more than just audio — it’s adding all sorts of new visual elements. But that has some regulators worried about driver distraction — and it’s something broadcasters may be impacted by. With album art, station logos, advertising and other messages piggybacked on digital signals, digital radio is more visual than ever before. Roughly 400 stations have deployed the Artist Experience feature so far according to iBiquity. A limited amount of testing has been conducted so far on what the impact of album art on a dashboard receiver has on drivers. Honda conducted one of the studies. It put 20 people behind the wheel while performing an album art recognition task. Using metrics such as eye-glance behavior it determined static images like album covers don’t significantly affect driving performance. Researchers said the typical glance at album art lasted 1.73-seconds. That’s within the 2-seconds glance away standard adopted by the auto industry since above that the risk of a “crash or near-crash event” increases rapidly. But the National Highway Transportation and Safety Administration still has concern about album art. It says Honda’s study should have compared using the images to using words to search for a particular piece of content. That’s because research shows Americans actually perform better with words than images when performing a task. Regulators worry flashing art could lead drivers to glance down at the image frequently and for unsafe durations of time. “NHTSA believes that an increase in visual entertainment for a driver is not worth a potential decrease in safety,” the agency concluded. But the agency is punting for the moment, not blocking static images but also not issuing a blanket approval either.

**For some Subaru drivers, HD Radio comes in clear, but mostly loud.** Imagine driving down the road and, as a station flips from digital to analog reception, the volume doubles intermittently as the dashboard receiver picks up and loses the digital signal. For the listener, the program goes from too quiet to blaring in a second or two. That's what some drivers of 2014 Subaru models say they're coping with. After getting complaints from a relative, Saga Portland chief engineer Andy Armstrong experienced the glitch firsthand while driving 25 to 30 miles from the transmitter of a Class B station. "As HD comes in and out, the level disparity is huge — it makes the station unlistenable," he says. Still, Armstrong says when the standard Subaru receiver was in digital mode the quality of the sound rivaled that of CDs — a claim made by digital radio developer iBiquity that he says lives up to the hype. "But if this keeps on going like this, this is going to be a bigger threat than internet radio — this is going to be an audience-killer," Armstrong says. "It gives them another reason to stop listening." A Subaru spokesman says the company is looking into the issue and that it could simply be that the flipping of the signal from FM to the clarity of HD reception gives an impression of an increase in volume. The rollout of HD Radio, which is now installed on more than 9.6 million cars across 170 vehicle lines, has largely been glitch-free during the past several years. Broadcast engineers say some units, like those installed in Ford models, are delivering particularly good sound quality. But Armstrong thinks the FCC should allow broadcasters to send a "flag" to a receiver to turn off the digital for the main signal if they choose. "That way we can do this digital transition without harming our existing audience," he says

**A Wild West moment in the digital dashboard.** Broadcasters see the fast-changing connected car as a new opportunity — and a potential threat to listening. Both could come to pass, but for now time may be more on traditional radio's side, according to key players in the digital dashboard industry. A lack of standardization or agreement on core basics has created a "mess" that few consumers are willing to navigate, they say. Among drivers with a digital dashboard, 9% listen to web radio daily — 13% listen at least once a week, Strategy Analytics data shows. "Our survey shows in the U.S. there are more and more people who are using apps in the car, but it's still a smaller figure when you talk about everyday use," auto analyst Roger Lancot told a CE Week audience yesterday in New York. He thinks there's a bit of a jumble in the marketplace right now. "There is a groundswell of innovation — so you're getting a proliferation of audio apps — but increasingly the challenge facing the industry is how to manage all this content," Lancot said. TuneIn VP Carl Rohling said automakers see their telematics solutions as unique to their brand as what's under the hood. Each car company wants to customize the service and alter what the user interface looks like. "Each time we engage with a new [car company] they have a different approach to the way they feel it should be delivered to the car," Rohling said. Yet people are finding a way to figure it out. Pandora says it has more than 2.5 million people in the U.S. listening in cars, while TuneIn reports 2 million auto listeners worldwide. Despite the wild west environment, BMW of North America product manager Eric Sargent said the trend is here to stay. "The customer can pick and choose what they want to use," he said. Even so, Lancot points to Arbitron data showing 84% of people believe FM/AM radio is still important for the car. "Radio is not going away from the car," he predicted. "But people are looking for smartphones and other kinds of content, and there's a little bit of erosion to AM/FM radio." What has him so sure there will continue to be a place for broadcast radio came from

Oklahoma City which was hit by tornadoes in recent weeks. “Radio was always there even when the cell towers went down,” Lanctot said.

**Smartphone or built-in? Key questions remain for connected car developers.** Today most people are connecting their smartphone to the dashboard to access internet radio, but whether that will be the model going forward remains an unanswered question. “The smartphone has a very powerful role in the car,” Strategy Analytics auto analyst Roger Lanctot told a CE Week audience yesterday in New York. But more than anything, he wonders whether consumers have reached their limit — or if they’re willing to jump through hoops to get the content they desire. Some higher-end auto brands such as BMW, Mercedes Benz and Tesla now offer an embedded option whereby the internet connection doesn’t rely on smartphone. TuneIn has tested a built-in integration in Tesla Motors autos which gave buyers unlimited access once they paid upfront for the car. But VP Carl Rohling said while that works in a high-end model, it’s not a mass market solution. “If you are 20 years-old, you have no issue carrying a phone and going through the process of getting your content,” he says. Rohling thinks carmakers realize they’ll have to make it embedded so turning on web radio becomes as easy as pushing a button. Based on the interest he’s seen from Sprint, Verizon and AT&T — all of which want to sell dashboard data plans — Rohling believes built-in web radio will eventually be the standard in a few years. Aha Radio VP Chia-Lin Simmons thinks the debate will be settled by consumers, who are tethered to their smartphone with many viewing plugging into the dashboard as a charging opportunity more than anything. “That connectivity is just going to happen,” she said. But whatever carmakers and tech companies put in the dashboard must look like the broadcast radio that most people are comfortable with, Simmons said: “That user experience has to be so deeply integrated that it’s as easy to use as radio.”

### **Don’t Rip The Knob Off**

There aren’t a whole lot of physical knobs and buttons on most of the “digital dashboards” rolling off the assembly lines these days. But as the automakers grapple with finding ways to improve the user interface in their infotainment systems, we may see and hear more and more old school radio terms and gadgetry.

But that’s the whole point. While streaming radio and “connected cars” may be innovative, they often leave consumers confused about how to use and enjoy them. It’s the same with the pure-plays. Hence, references to familiar, comfortable touch points.

And brand names like Pandora *Radio*, Slacker *Radio*, and iTunes *Radio*.

The next step in the devolution is familiar radio hardware to help make drivers safer and more familiar with what’s in front of their faces. Earlier this year at CES, we interviewed Chrysler’s Joni Christensen, head of that company’s **UConnect** system, about the “digital dashboard.” Her her comments echo the need for simplicity and the radio experience:

“...when you’re in radio mode, you see radio. If you go to a player, you’re in the player. So you have the controls, but we also have the familiar controls so we didn’t force people to use the touch screen. We left what is utilitarian and practical so people can adapt technology to their own pace.”



Ford is also moving to a blend of knobs and buttons, along with their touchscreen technology. Earlier this month, they **announced** their “center stack” will be modified in 2014 models featuring MyFord Touch, similar to what is now on their F150 trucks:



This speaks to the need for automakers to make it intuitive, clean, and easy for consumers. While they may enjoy multi-options when they drive their vehicles, the need for simplicity comes through loud and clear.

One of the best ways to make this happen is to mimic an experience that is second nature to people – tuning in and listening to a radio. It’s the goal of the automakers to embody the radio experience, albeit on a different platform. But because everyone’s reference point is radio, they’re simply using that familiar customer interface that is nearly a century old.

And that should stimulate those in broadcast radio to examine their own house to evaluate the current state of audio entertainment. In Techsurvey9, we asked the 13% of our sample who says they’re listening to *less* radio these days to tell us what are the main drivers behind these decreases?

Once you get beyond lifestyle – changing jobs, moving, and other “uncontrollables” – it turns out that “self-inflicted wounds” are more corrosive than the many new competitors

now facing radio. Dissatisfaction with programming and complaints about commercials actually trump iPods, satellite radio, pure-plays, mobile phones, and video games.

To satisfy consumers, it is essential to listen to them. From J.D. Power ratings to dealership feedback, the automakers are seeking to eliminate their “self-inflicted” wounds by focusing on the ease and simplicity of radio.

Shouldn't the radio industry be doing the same?

**Automotive conference shows connected car on a fast track.** Infotainment systems were in A-rotation at the largest automotive telematics conference this week in Detroit. But like broadcasters, they're still figuring out which route is best to take. “Everyone agrees that we have to do something about the connected vehicle, but in regards to what to do about it, there's not a lot of clarity,” Gartner analyst Thilo Koslowski told the Telematics Detroit crowd according to WWJ. Jacobs Media president Fred Jacob — whose company builds apps for stations looking to get into the next generation dashboard —

thinks carmakers are listening to new cues. “It's really driven by consumers and their smartphones,” Jacobs says. “People aren't asking for telematics for safety features, they want entertainment and information content.” With automakers experimenting with different systems and content partners to enable consumers to access their favorite content from the dashboard, Jacobs said it was surprising how few radio broadcasters were present and how many webcasters attended. In addition to distribution ramifications for radio, the conference also touched on a sales issue for what has traditionally been radio's biggest advertising category. During a panel discussion of dealership executives, Michigan Automobile Dealers Association EVP Terry Burns proclaimed the cell phone as the No. 1 way to sell a car, noting how consumers are using them for everything from research and product comparisons to pricing and lease information. A Borrell report released last week showed more carmakers are shifting ad budgets toward mobile.

**Music analyst says ease of digital radio in dash is the real threat to radio.** It's not internet radio that broadcasters need to worry about in the car per se, but rather the ease to connect to services like Pandora or Spotify. NPD Group senior music industry analyst Christopher Coby says throughout the history of dashboard music it's never been about sound quality, portability or on-demand usage. “Through simple ease of use and accessibility, AM/FM has ruled from the beginning,” Coby



observes. In a blog post he says NPD data shows the car continues to be a place where consumers most often listen to terrestrial radio. But listening to web radio currently ranks sixth in NPD Group's latest ranker of in-car listening habits. Just 2% of people said they used web radio because of what Coby attributes to the complications of connecting a smartphone to a dashboard radio. "Time, effort, lack of a Bluetooth connection, and yes wires, are simply too much for many folks," he says. Compare that with the 49% who reported they "usually" listen to music. Even on-demand can't beat FM/AM with just 12% typically listening to CDs. But what's changing is new digital dashboards have web radio built in, removing hurdles for the not-so-tech-savvy. Coby says that opens up new listening possibilities for drivers. The jury's still out but web radio may end up becoming another secondary service along the lines of Sirius XM Radio. NPD Group says only 8% of people in its survey reported listening to satellite radio

## AAA Study Says Siri Drives Us To Distraction

by [Thom Forbes](#), 17 minutes ago

The gist of a report from the American Automobile Association on the growing use of devices that allow drivers barreling down the interstate to use voice commands to do everything from turn up the AC to draft the Great American Business Memo?

Stop doing it, period. Right now, exclamation mark.

"Automakers have been trying to excite new-car buyers, especially younger ones, with dashboard infotainment systems that let drivers use voice commands do things like turning on windshield wipers, posting Facebook messages or ordering pizza," the Associate Press' Joan Lowy [writes](#). "The pitch has been that hands-free devices are safer because they enable drivers to keep their hands on the wheel and their eyes on the road."

But the AAA study puts the kibosh on those safety claims.

"There is a looming public safety crisis ahead with the future proliferation of these in-vehicle technologies," AAA President and CEO Robert L. Darbelnet says in a statement accompanying the release of the report titled "[Measuring Cognitive Distraction in the Automobile](#)." "It's time to consider limiting new and potentially dangerous mental distractions built into cars, particularly with the common public misperception that hands-free means risk-free."

University of Utah psychologist and cognitive distraction expert [David Strayer](#) and his team "measured brainwaves, eye movement and other metrics to assess what happens to drivers' mental workload when they attempt to do multiple things at once," the *Daily Mail* [reveals](#).

The team also developed a 1-5 [rating scale of driver distractions](#) that shows that activities such as "talking on a hands-free cell phone or interacting with a speech-to-text email system place a high cognitive burden on drivers, thereby reducing the available mental resources that can be dedicated to driving."

The AAA has rolled the results of Strayer's work into a 90-second [video](#) about Cognitive Distractions that compares the condition to "having tunnel vision behind the wheel." The bottom line is that "you're not necessarily safer just because your eyes are on the road and your hands on the wheel if your brain isn't geared on driving."

Robert Gearty, [reporting](#) for the [North Jersey] *Record*, spoke to one 55-year-old driver who told him that the findings didn't surprise him and he "could understand how someone might get distracted as they tried to compose an e-mail to the boss using a voice-activated system..."

"You're thinking about what you're doing and you become hypnotized to what you're sending out," says Sal Aliano. "I can see that."

But as you might have guessed, the [Alliance of Automobile Manufacturers](#) disagrees with the findings, David Shepardson [reports](#) in the *Detroit News*.

"We are extremely concerned that it could send a misleading message since it suggests that hand-held and hands-free devices are equally risky. The AAA study focuses only on the cognitive aspects of using a device, and ignores the visual and manual aspects of hand-held versus integrated hands-free systems," says spokesman Wade Newton. "There are many other academic studies under way, and road safety will be enhanced by letting the complete body of research drive policy recommendations."

Meanwhile, over at the [World Wide Developer's Conference](#), Eddy Cue, Apple's head of the company's internet software and services, revealed that 12 car manufacturers have come on board since the company announced Siri Eyes Free at last year's gathering of geeks, [according to](#) the *San Jose Mercury News*, and improvements will be forthcoming in iOS 7.

"Siri's capabilities have received a serious overhaul and now the voice-activated, talkative virtual assistant can make web searches and access information via Bing or Wikipedia, read back tweets, and control elements such as screen brightness and volume," the story reports.

Siri is already taking commands and jibber-jabbering back in some Chevrolet, Honda, Acura, BMW and Mercedes-Benz vehicles while Nissan, Infinity, Kia, Hyundai, Volvo, Opel, Jaguar Land Rover and Ferrari have "pledged their support," we are told.

The AAA-sponsored findings expand and reinforce the results of a study released by the Texas Transportation Institute at Texas A&M University in April that compared voice-to-text and traditional texting on a handheld device in an actual driving environment. It found that "driver response times [were] significantly delayed no matter which method was used," Reuters' Jim Forsyth [reported](#) at the time.

“In each case, drivers took about twice as long to react as they did when they weren’t texting,” Christine Yager, who headed the study, told Reuters. “Eye contact to the roadway also decreased, no matter which texting method was used.”

In March, Chevrolet [rolled out a commercial](#) touting “the button to end all buttons” and Siri’s full integration into its Sonic models.

Well, it sure sounded like a great idea.

**Ford will bring back old-fashioned knobs and buttons to car radios.** After third-party quality reports showed consumers find the MyFord Touch system difficult to use, the automaker is bringing back old-fashioned tuning and volume knobs on its radios. Customers were becoming frustrated with not having the ability to quickly change stations or turn the volume up or down, according to the Wall Street Journal. That led to a decision to add more buttons and knobs and simplify the touch screen. The news comes after research showed the Ford F-150 with MyFord Touch had the highest rate of quality satisfaction of all Ford vehicles. The truck blends high-tech touch screen capability with old school buttons and knobs. Ford says the radios will be updated across its line as vehicle models are updated or replaced. The reversal comes as Ford is attempting to address continued complaints about the system, which helps it sell vehicles.

**A majority of Ford vehicle buyers are opting for a digital dashboard.** Six years after Ford led the connected vehicle charge — putting radio in direct competition with other digital entertainment options in the dashboard — a majority of vehicles sold by the automaker now offer the technology. The carmaker says its Sync voice-controlled connectivity and My Ford Touch screen technologies are sold on 79% of new 2013 Ford vehicles. That’s double the rate of Toyota and Honda vehicle infotainment systems and up from 68% in 2012. It includes a My Ford Touch mix of 55%, up from 12% in 2012. Ford says its consumers cite voice control and touch screens as top purchase drivers much more often than its competitors. For example, 53% of 2013 Ford Escape owners say the touch screen is a top purchase reason compared to a 22% segment average. Vehicles with MyFord Touch are helping improve the brand’s perceptions as customers who own vehicles with the system are more satisfied with overall vehicle quality compared to those who don’t have it, Ford says. Meantime its Sync infotainment system is helping attract younger car buyers.

## Neuroscience, behavioural studies suggest hands-free texting still distracted driving risk

TEXT SIZE  

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Voice recognition technology that lets users operate smartphones without typing does not eliminate the risk of distracted driving, a recent report suggests.

"The crash risk associated with hands-free texting while driving is not as well understood because in-car voice-to-text technology is relatively new," according to a report by the Traffic Injury Research Foundation. But recent studies "support the contention that

hands-free texting while driving poses significant distraction, and, consequently, unacceptable crash risk."

The report, titled "[Driver Distraction and hands free texting while driving](#)," was sponsored by Advanced Drivers Education Products and Training Inc. It was written by Daniel Mayhew, Robyn Robertson, Steve Brown and Ward Vanalaar.

They cited several studies, including one published in the journal *Frontiers in Neuroscience* and written by six Toronto-based researchers, including Tom Schweitzer, director of the neuroscience research program at St. Michael's Hospital and a professor of medicine at the University of Toronto.

That paper, titled "[Brain activity during driving with distraction: an immersive fMRI study](#)," discussed observations from an experiment in which people were driving in a simulator with a fully-functional steering wheel and pedals. They were monitored using magneto resonance imaging (MRI).

While driving in the simulator, the participants were asked to respond to general knowledge questions, whose answers were either true or false. They indicated their answers by pressing buttons on a steering wheel designed to be "similar to modern vehicle designs for answering hands-free devices or volume controls," the TIRF report noted.

"The authors found that during distracted driving, brain activation shifted dramatically from the posterior of the brain, which governs visual and spatial areas, to the prefrontal cortex, which regulates cognitive function and decision making," the TIRF report noted of the study. "They may look but not 'see' what is happening in the driving environment."

TIRF noted in its report that cellular phone use is "just one small part of a much larger problem" of distracted driving, adding it also includes talking to passengers, eating, grooming and using vehicle navigation systems and multifunction controllers.

"Drivers can suffer from cognitive overload," TIRF warned. "At this stage the brain must decide which information will receive attention."

The TIRF report also quoted from a study published in April by the Texas A&M Transportation Institute.

That study, managed by Christine Yager, associate transportation researcher for the Texas A&M Transportation Institute, involved 43 participants who were observed both on response times and where they were looking. They drove a vehicle using no cell phones and then while sending and receiving text messages, both using manual entry and while using two different voice-to-text applications.

In Yager's study, TIRF noted, [driver response time was about two times slower](#) and the time they spent with their eyes off the road "significantly increased" when they used any application for texting, even if it was hands-free.

"Although suggestive, the Yager study had a small sample size and further research will need to be conducted to replicate the findings as well as establish the crash risk of hands free texting," the TIRF report noted, but added there are still reasons to be concerned.

When drivers text using hands free applications they are "multi tasking" and that increases the drivers' "cognitive workload," TIRF warned

## Akerson: 4G in vehicles a money-making opportunity

Partnership with AT&T could provide new source of revenue, GM CEO says

- By Melissa Burden
- The Detroit News

General Motors Co. Chairman and CEO Dan Akerson said Thursday he sees a "revenue-generating opportunity" with the roll out of 4G LTE connectivity in its U.S. vehicles beginning next year.

The automaker, in February, announced a partnership with AT&T to bring embedded 4G LTE mobile Internet access into most 2015 GM vehicles sold in the U.S. and Canada, with roll outs beginning in mid 2014. Customers won't need a smartphone or table to use the Internet services.

Akerson indicated in a conference call with financial analysts that GM may receive some type of a fee from AT&T as customers sign up for new connected services; the company receives nothing like this today. The automaker may also have revenue sharing included in its agreement with AT&T. GM wants to enhance its OnStar subsidiary from primarily a "safety and security business" to one that's feature rich.

"We've never been properly compensated in my opinion, having come out of this industry, in terms of what we provide to the carriers," Akerson said.

GM, in a statement Thursday, would not confirm the \$20 per-vehicle revenue opportunity Akerson cited.

"During the call, some specifics were offered up regarding our partnership with AT&T and the new business model opportunities it may create," GM said in the statement. "These comments did not disclose the entirety of both sides of our agreement with AT&T and we are not prepared to discuss those particulars at this time. We may share more at a later date, closer to vehicle launch."

AT&T will provide an in-vehicle connection for GM subsidiary OnStar's safety and security services and provide services such as streaming audio, Internet, application downloads, streaming video for back-seat passengers and enabling the in-vehicle Wi-Fi hot spot and voice calling.

Akerson said in-car 4G gives the company opportunities such as potentially putting an insurance company's logo on a vehicle screen.

Akerson called some of the ideas "potentially lucrative lines of business" that would have a low marginal cost to the automaker.

"We are not in the wireless business, but we are facilitating a customer and we're facilitating content," he said. "So there is a whole new frontier for us that I think we'll have margins that will exceed which you typically see in the manufacturing business."

**Citi Investment Research analyst Itay Michaeli has estimated GM's OnStar revenue at \$1.5 billion with margins of 30 percent to 35 percent. OnStar has 6.4 million subscribers in the U.S., Canada and China**

## Telematics Ecosystem Booming, But Caution Advised

by [Karl Greenberg](#), Yesterday, 2:05 PM

The head of marketing for, say, Starbucks, is probably thinking about cars. Specifically, how to go beyond radio ads by exploiting streaming content and entertainment channels, and location and loyalty data to talk to consumers when it's most advantageous.

Say I -- a loyal customer -- am driving past Starbucks, when I get a ping on my smartphone and a simultaneous message over the car's audio system saying that I might want to stop in now for a free coffee. The coupon has been downloaded to my smartphone. I also have a message that if I share my location with friends on, say, Glympse, they also get offers if they meet me for coffee.

How far out is this? Can it happen now? Should it? And how can marketers even begin to understand the opportunities and limitations of new in-car media?

A recent J.D. Power study said more than half of vehicle owners said their next car would definitely or probably include wireless connectivity or the ability to sync with their smartphones. According to a 2012 study by auto technology company SBD and global mobile technology organization GSMA, penetration of global integrated telematics will reach 88% of new cars by 2025.

Market research firm eMarketer, in a report on the car as the "fifth screen," says use of smartphone apps for Pandora, Spotify and the like for music has more than doubled since 2010.

And app makers are busy developing products that are ideal for cars: the above-mentioned Glympse, Amazon's Rhapsody, audi-response app Kaliki, and *USA Today* in-dash news reader, for example. And then there are aggregators like Harman's Aha infotainment delivery platform, which customizes content based on location, heading and preferences. And there are location-agnostic radio channels like TuneIn, which offers thousands of radio channels.

eMarketer quotes a Booz study that says 85% of auto execs ranked in-vehicle connectivity and entertainment as the most likely auto technologies to see widespread adoption in coming years.

But Henry Bzeih, Kia Motors America's chief tech strategist, tells Marketing Daily that, while the smartphone and app technology exists for marketers to make offers based on

driver location, loyalty data and preferences -- the big challenge is distraction. He says this engagement, such as it is, has to happen "when the journey ends, or when you can pull over to introduce that information. Technically real-time is feasible, but in terms of [avoiding] driver distraction, there just isn't enough there to make something happen actively."

One less contentious channel is to the passengers. General Motors, BMW and others are engineering telecom platforms that will turn vehicles into 4G hotspots. Bzeih says this opens a huge marketing opportunity, since there aren't distraction issues in the back seat. General Motors CEO Dan Akerson has said as much. He said the automaker sees revenue streams both from 4G subscriptions through partner AT&T but also from advertising. "If you step away from the [dashboard] head unit and look holistically, there's huge potential in the rear seat for communicating to the family. There are no distraction issues marketing to those folks via streaming events."

In any case, it might be a good time for marketers to sit on their hands until regulatory guardrails are in place. Early this year, the U.S. Department of Transportation issued Phase I recommendations for limiting in-vehicle telematics/infotainment/phone distractions. Suggestions: reduce complexity, operations, visuals in and out of the driver's field of vision, social media, browsing, etc. Phase II will focus on mobile devices brought into a car, and Phase III will deal with voice-command technology.

David Sullivan, who heads cross-car planning management at Subaru, says these moves could be a game ender, at least for the moment. "Now that the government is getting involved, [marketing engagement via infotainment] will be a lot more difficult. Nobody wants to be the one who does that and runs someone into a telephone pole. In some respects, the jig may be up. I really think it will limit expectations of what can be done."

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- The Detroit News

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**As HD Radio automotive penetration rises, so does internet radio.** While the CD player is slowly leaving the dashboard, HD Radio is gaining ground. "It's beginning to take off, it's just a slow start," Consumers Electronics Association senior director of technology and standards Mike Bergman said. By his forecast, HD Radio will be built into 33% of all new cars by 2016. But it will have plenty of company in the center stack. By 2016, the penetration rate for Bluetooth-enabled cars will grow to 42%, while in-car internet radio penetration will soar to 82% and iPod connectivity will reach 90%. Concannon Business Consulting EVP of strategic planning Jon Bucci sees HD Radio penetration growing faster. "Product placement planners are moving to a place where HD will be at 100% penetration very soon," he predicted during a panel at this week's NAB Show. But there are some quality concerns. A recent JD Powers study found consumers weren't satisfied with how reception sometimes flips back and forth between digital and analog due to weak signal strength. Bergman believes iBiquity has done a great job getting HD Radio built into new cars but says the "consumer pull" or demand for the product just isn't there yet. "Only the broadcasters can generate the consumer pull and there is some challenge in developing that pull when it's for a technology as opposed to content," he said. He also believes the industry can do a



better job in executing the HD Radio experience, which has become more complicated by the addition of features like Artist Experience. "You have to make sure there are a lot of cylinders firing," he said, adding that one station doing a bad job could damage the perception of HD Radio for other stations.

**Radio's competition in the car becomes the radio itself.** The digital dashboard isn't just blurring the lines for radio; it's also shaking things up for receiver manufacturers. Three years ago Harman branched out into the content realm with a deal to buy Aha. Now Panasonic is doing the same as it strikes a deal to buy the German-based audio streaming company Aupeo. Terms of the deal weren't disclosed — it quickly follows an announcement in January that the two companies had formed a "strategic collaboration." Panasonic president of American auto systems Tom Gebhardt says it's the connected services and mobile content that consumers now use to differentiate between auto industry products. "Conventional consumer-focused music and content services do not address all the needs of car manufacturers," Gebhardt says. Aupeo offers more than 6,000 channels of terrestrial radio, although it hasn't yet signed any deals in the U.S. market. But that's likely to change now that it's working with Panasonic's North American business unit. As an online content provider, **Aupeo CEO Holger Weiss says the company saw the car as its "most important focus."** It has already struck deals with Mercedes and BMW. Panasonic's role in Chevrolet's MyLink and Chrysler's Uconnect is expected to give Aupeo an entry point into U.S. cars.

## AM/FM Still 'King of All Media' In-Car

by Leslie Stimson

on 04.03.2013

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AM/FM radio continues to be "the king of all media" in the car, but expect smartphone connectivity to grow in-vehicle, according to Arbitron SVP Marketing Bill Rose.

That's a big takeaway from the latest Infinite Dial study by Arbitron and Edison Research.

AM/FM radio leads over other in-car audio options at 84% of drivers who had "ever" used this option, compared to 63% who used a CD player and 29% who used an iPod/MP3 player. Fifteen percent said they listened to satellite radio, followed by online radio at 12% and HD Radio at 3%.

When asked what audio option they use most of the time in the car, **58% said AM/FM radio, followed by 15% who mainly listened to CD players and 11% who said online radio. Satellite radio followed at 10%, followed by 4% for online radio and 1% who said HD Radio.**

"We think Bluetooth availability will have a big impact" on these numbers, Rose said. Nearly three-in-ten, or roughly 28%, said they have a Bluetooth connection in their car. "This number is going to grow and it's worth keeping an eye on," said

Rose.

Ditto for in-dash infotainments systems. while only 6% have them now, researchers expect this figure to increase over time as well.

Also, one-in-five (21%) have used their cellphone to listen to online radio in a car. That compares to 6% who did so in 2010.

The use of podcasting has slowed as more Americans have DVRs in their home.

Some 45% of consumers have a DVR in their home now, compared to 28% in 2008.

Radio stations may want to relaunch their podcasts to a wider audience and claim ownership of time-shifted radio, said Edison Research VP Strategy & Marketing Tom Webster.

This is the 21st Infinite Dial study. Researchers interviewed more than 2,000 people about their use of digital platforms and new media. Download the study from either [www.arbitron.com](http://www.arbitron.com) or [www.edisonresearch.com](http://www.edisonresearch.com).

## General Motors and Orange Partner With Klout

Brands look to harness social influencersBy [Christopher Heine](#)

- April 2, 2013, 3:31 PM EDT
- [Technology](#)
- 

General Motors Canada and Orange, the French telecom giant, have partnered with Klout as the brands look to increase social media chatter around their respective products.

[GM](#) has signed a one-year exclusive deal with Klout, the latter company told Adweek, that will offer Canadian social media influencers test drives of Cadillac, Buick and GMC vehicles. The development follows a recent Klout-based push in the U.S. for the automaker's Chevy Volt.

And Klout, a social influence firm, announced via a [blog post](#) today its deal with the socially-minded Orange. **Klout typically helps brands select the most relevant social media influencers in its large network.** The influencers—which normally have big Twitter followings—are then notified on Klout's platform about the opportunity to try out a product for free. At the same time, Orange is still zeroing in on how exactly it will leverage its Klout partnership.

"We want people to talk about us in a productive way," Odile Roujol, director of marketing and communications for [Paris-based telecom](#), told Adweek. "We've partnered

with many social media companies, including Facebook, Google+, Twitter, Foursquare—all of them. Our long-term deal with Klout is meant for us to learn together."

In the near term, Roujol's brand hopes to foster dialogue around Orange's 4G network launch in France next week. The partnership also marks San Francisco-based Klout's first major foray into the French market.

"It is good for us to be at the beginning," Roujol said. "We are very proud to be the first brand. We will use Klout data to better understand the discussion via the web and social networks. We will learn how we can improve."

## **GM Bets The Telematics Farm: Onboard 4G LTE Worldwide**

by [Karl Greenberg](#), Yesterday, 3:36 PM

General Motors is going to be the first automaker to put 4G LTE mobile broadband in cars and trucks worldwide. One might think of it as OnStar crossbred with an iPhone, or maybe an iPhone on wheels. The company says most 2015 model Chevrolet, Buick, GMC and Cadillac models in the United States and Canada will get the service via AT&T, and that worldwide carrier and supplier relationships in coming months will put the service in brands like Opel and Vauxhall.

As Wi-Fi hot spots, the vehicles will get new infotainment options like streaming video entertainment in the back seat, real-time updates and faster application downloads, per the company. Jesse Toprak, head of industry analysis at [TrueCar.com](#), notes that it's a major detour from the established platform epitomized by telematics systems like Ford's Sync, where the in-car technology serves as a kind of landing strip for whatever mobile device a driver (or passenger) brings into the car: smartphone functions, apps and services.

"GM was also moving in that direction on vehicles like Spark, where the interface was fueled by apps. So even for GM it's a bit of a departure," says Toprak. He adds that the benefit of smartphone-based technology is that it shifts the "heavy lifting" to the mobile device. "All of us live with smartphones, and that's probably sufficient as long as the experience is seamless to the end user. The advantage [of 4G LTE] is it will really increase bandwidth to allow things like streaming video for passengers. But I'm not sure how much of a market there is for that."

Mary Chan, GM's VP of the automaker's global connected consumer division explained in a statement that the platform actually does make the car its own de facto smartphone on wheels. "In addition to allowing consumers to bring in and connect to personal mobile

devices, the vehicle will also act as its own mobile device, enabling embedded vehicle capabilities.” She suggested that the collaboration with AT&T and developers will make the platform scalable.

Paul Eisenstein, autos editor for NBC and president of TheDetroitBureau.com, tells Marketing Daily that for the new technology to get real consumer traction, it must be a whole lot more than just an on-board hotspot. "It's worth it if I'm looking to have advantages beyond just a Wi-Fi in my car. If all I'm going to be able to do is hook up a cell or tablet, it's just not that valuable. If it adds a lot of features -- if by this you have created a whole network of things I can do behind the wheel -- then it's worth it."

The company said the 4G LTE connectivity will, in fact, offer an ever-growing ecosystem of features -- some that transcend the kind of benefits you get from portable smart devices. "The key is," says Eisenstein, "while it's a cool concept, will it really matter?"

**The expansion of 4G wireless services will help to bolster m-commerce and other types of mobile consumption. The number of 4G users in the last year has shot up 273% to 33 million. Verizon has almost a third (31%) of the market, followed by AT&T, at 27%. Growin**

## **2/28/13: Tech journalist thinks in-car 4G means "radio's got a pretty big problem"**

**High speed in-car connectivity could be a threat, but also an opportunity, for radio**

Posted by: [Paul Maloney](#)

**This week** we reported GM will equip several 2014 automobiles with **4G mobile** connectivity, enabling data speeds of up to ten times that of 3G connections (see [RAIN here](#)). American Public Media's "Marketplace Tech" covered it too, and focused on the **implications for traditional AM/FM radio**. Its headline: "**GM's Internet cars: The end of FM radio?**"

**Show host** David Brancaccio spoke with CNet executive editor Molly Wood, wondering if the new tech would be a "big opportunity, or a big pain-in-the-neck, for regular FM and AM radio stations that also cherish the in-car audience."

"Once this becomes readily available and the price for it is built into the price of the car," Wood said, "I think **radio's got a pretty big problem**."

**Her prediction** did come with some caveats. The first is **cost**. 4G is currently pretty pricey. Next, 4G coverage can still be **spotty**.

**As Brancaccio** suggested, however, there's also **opportunity here for terrestrial radio**. "Some existing radio stations are very **strong brands**, and if they get ahead of this... it might mean new listeners, not just in their traditional listening area, but across the country," he said.

**Wood concurred**: "And that is **definitely** the opportunity. If the content is there, and people want it, I think that's **absolutely a huge opportunity**. And I do think that there will always be a place for local."

**g adoption of 4G could help drive high-bandwidth services like video**

**Forget the smartphone, 4G mobile broadband is coming to 2014 GM models.** Motorists will soon be able to save their smartphone battery life for later and connect to the web at speeds 10-times faster. Looking to leapfrog past Ford in the digital dashboard, General Motors plans to equip its 2014 models sold in the U.S. and Canada with 4G mobile broadband technology, according to the Wall Street Journal. Using a subscription from AT&T, motorists could access faster, more robust options in the center stack, further encroaching into what has long been a radio sanctuary. Touch screen displays of real-time traffic jams or construction sites on a route map would offer an alternative to radio service elements. The Journal envisions partnerships with providers like the Weather Channel to show weather radar projections and hourly forecasts based on the vehicle's current location. The feature opens up a host of video possibilities for the backseat. GM unveiled its plans at the Mobility World Congress in Barcelona yesterday afternoon. That's also where Ford announced it will be the first automaker to launch Spotify in the car. Forbes reports the voice-activated system would allow iPhone-equipped Ford motorists with a subscription to Spotify's premium on-demand music service to share playlists with friends by using voice commands, and instantly switch to a playlist they received on their Spotify account. Drivers could also add a track to their playlist, play similar music or start a song, album or station using voice commands.

## **Radios Ripped from New Cars? "Not So Fast," say Consumers**

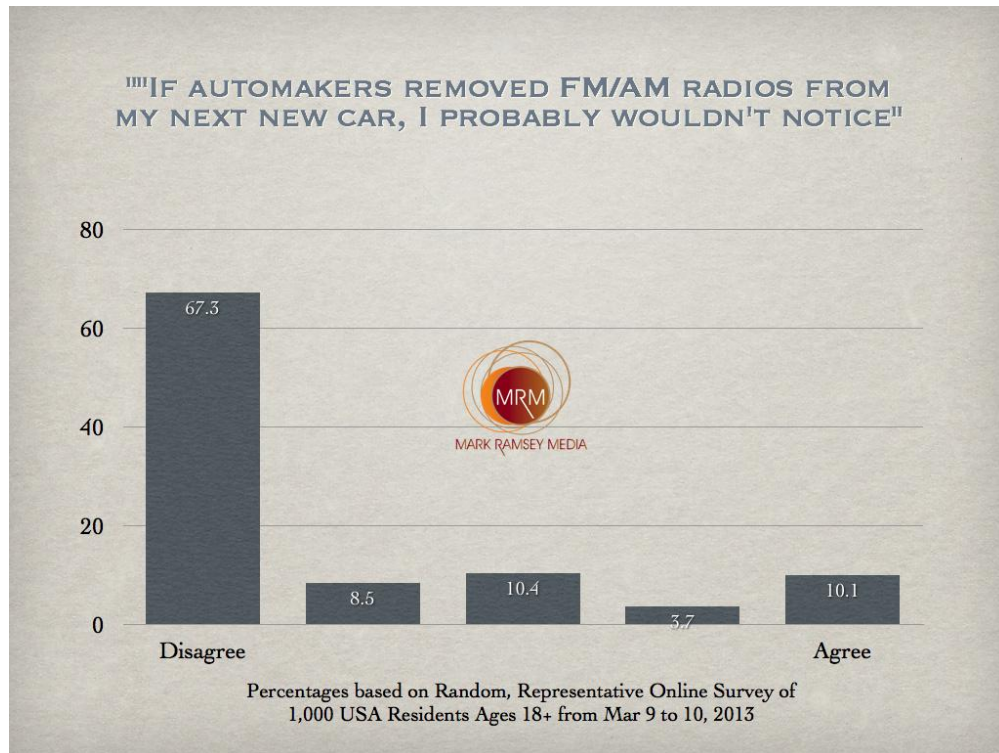
You can climb down from the ceiling now, Mr. Broadcaster – it turns out new cars *will* feature FM/AM radios built-in for the foreseeable future (although certainly not forever).

The logic of this should be obvious to us all, but particularly obvious for anyone who bothers to talk with consumers.

And I did.

Between March 9 and March 10 2013, I fielded a random, balanced, national online study of 1,000 consumers and asked how they feel about those radios in their cars – and how they'd feel if they disappeared. Each chart shows five rating points, from "DISAGREE" to "AGREE."

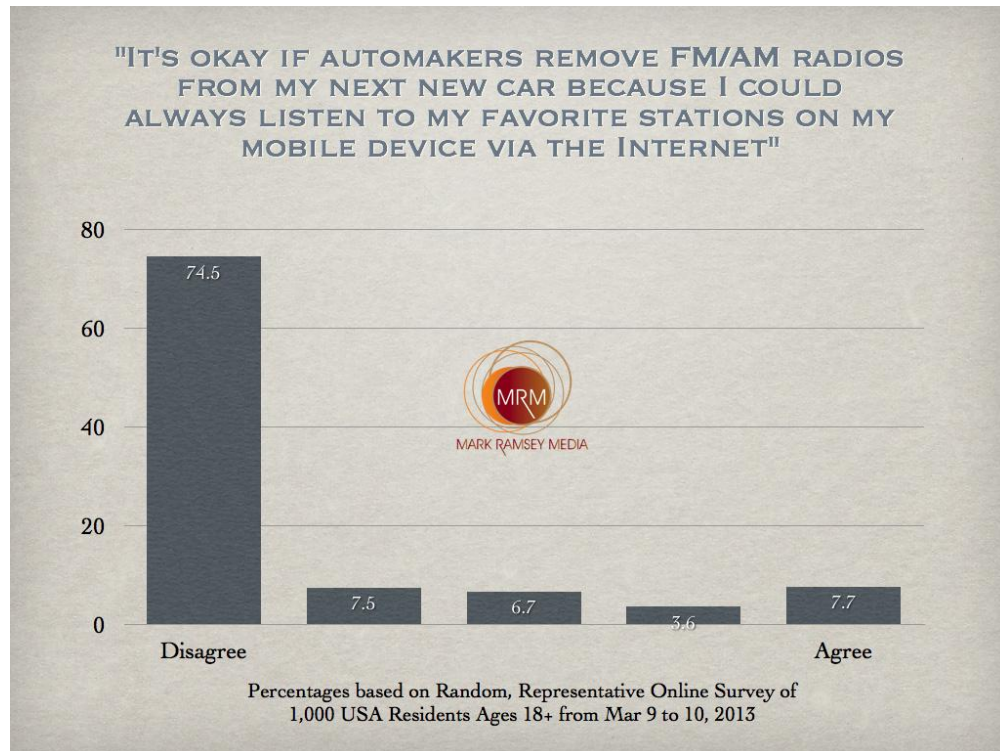
**First question – Agree or Disagree: "If automakers removed FM/AM radios from my next new car, I probably wouldn't notice"**



Um, yes. Pretty clear. When you forget to install a radio in a brand new car, Mr. Automaker, people will notice.

**Second question – Agree or Disagree: "It's okay if automakers remove FM/AM radios from my next new car because I could always listen to my favorite stations on my mobile device via the Internet"**





Um, no, it's not okay, actually.

The ability to access audio content via the Internet from mobile devices is not viewed by consumers as a *substitute* for the easy, ubiquitous, dependable radios in their dashboard. It's viewed as a *complement* – a new platform for new choices – not an invitation to limit choice to the mobile device-only. And not an invitation to create more work for folks accustomed to the miraculously easy tool that is a radio.

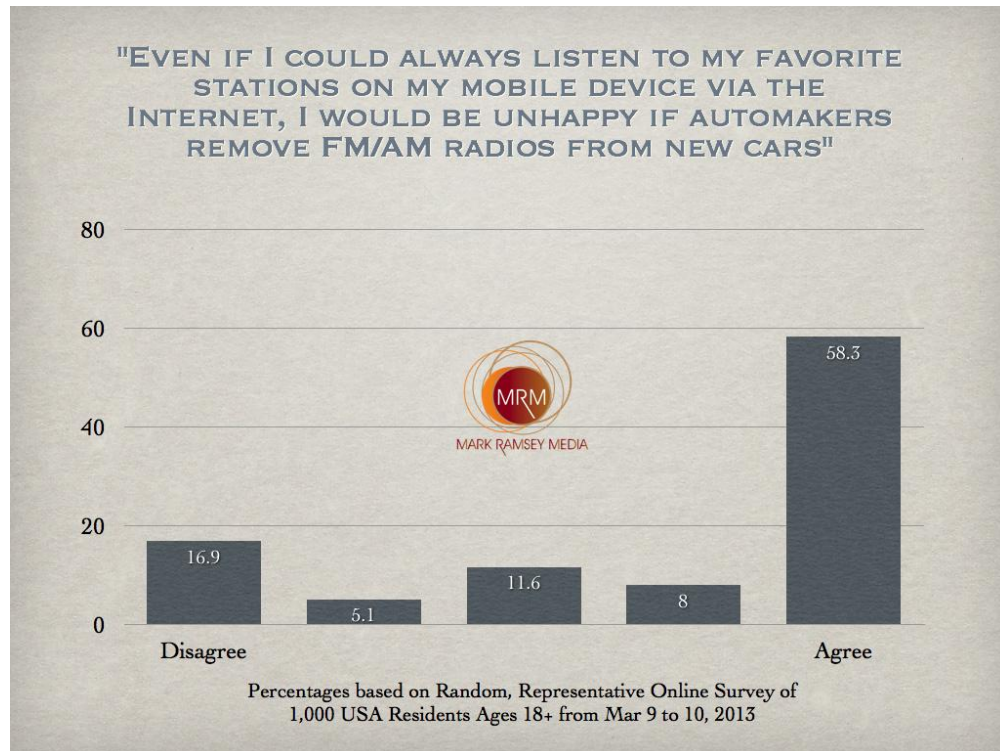
Don't get me wrong, by "complement" I don't mean these new choices will *add* to overall audio usage. Quite the contrary, I expect. Look for plenty of radio cannibalization, but less if your choices are among them, right?

*Broadcasters, I would argue that you're not streaming content to substitute for over-the-air listening, you're streaming content to give new people new experiences to consume in new places on new platforms and in new ways – the experiences, places, platforms and ways of their choosing, not ours.*

*And woe unto you if you don't keep pace with their choices.*

*Consumers are likely to use online radio as a terrestrial radio substitute, but that's their choice, and it's under their control.*

**Third question – Agree or Disagree: "Even if I could always listen to my favorite stations on my mobile device via the Internet, I would be unhappy if automakers remove FM/AM radios from new cars."**



A flip of the previous question. And oh yes, Mr. Automaker, “unhappy” appears to be an understatement.

The automakers understand all of this, of course. And for consumers it goes without saying.

Now, hopefully, broadcasters know the truth, too.

The disruption is happening and it is bound to accelerate. But we will not wake up tomorrow and discover new cars with no radios. Indeed, the problem is that those new cars will be full to the brim with entertainment choices galore.

And, as I said, woe unto you if you don’t keep pace with consumers’ choices.



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**Detroit’s Big Three automakers agree: FM/AM radio is here to stay.** The digital dashboard is bringing all sorts of things to drivers, but it won’t push FM/AM radio out of the front seat. That’s according to the big three automakers. General Motors, Ford and Chrysler each tell Inside Radio they’re committed to keeping broadcast radio inside their dashboards — and some are even doubling down on their commitment to it. “We have no plans to get rid of them because of their value for our customers,” Chrysler spokesman Eric Mayne says. He points out they’ve just announced plans to begin installing HD Radio as standard on some Dodge Ram pickups. It’s a similar message from General Motors where executive say they have “no near term plans” to stop installing broadcast radio in cars. “While we are excited about the possibilities of internet radio services and other emerging services, we understand that AM/FM radio is still a significant source of news and entertainment,” chief infotainment officer Phil Abram says. “In fact, it is an expected feature.” At Ford, the story is similar. Is AM more at risk? “There are no plans to ‘disband’ the AM frequency,” spokesman Alan Hall says. There are other reasons to keep broadcast radio in the



car too. Chrysler uses that same antenna to get traffic reports via FM RDBS to the dashboard systems.

**Radio will ride shotgun in the dash with satellite, internet and other content options.** Automakers have spent hundreds of millions of dollars to develop and roll out digital dashboard systems, which may make radio look like it has lost its luster. But in reality, the big automakers say their research shows drivers still expect FM/AM radio. They also like the free content it brings. And it's remarkably cheap and takes up little dashboard real estate in comparison. The hardware costs an average of less than \$10. Instead it's the CD player that's being phased-out. Some Chrysler models are making it optional and one model, the Viper, won't even allow for a CD unit to be installed. But Chrysler spokesman Eric Mayne says broadcast radio should get used to having its satellite cousin close by, too. "Our customers have communicated an appetite for satellite radio," he says. Chrysler became the first automaker last April to provide Sirius XM Radio's expanded suite of Spanish-language channels in its 2013 cars. Mayne says the automaker is happy with the response from customers. At America's No. 4 automaker Toyota, AM/FM radio remains in the dashboard and will do so for the foreseeable future. But VP of advanced technology John Bucci told *Inside Radio* last year he can imagine a day in his lifetime when cellular networks are reliable enough to put no-radio into the realm of possibilities. "But cellular-delivered content has in and of itself the challenges of drop outs, signal strength, and other connectivity issues," he said. As things stand today, Bucci says those connectivity issues make it a sure bet FM/AM radio will remain in the dashboard for the foreseeable future.

By [Dave Seyler](#) on Jan, 24 2013 with [Comment 1](#)

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The reasons? There are two primarily. One is the growing availability of in-vehicle internet capability, which allows Pandora into a venue once battled over mainly by Sirius XM and AM-FM radio. The other is the possibility of the Internet Radio Fairness Act becoming law.

Sirius, which does not make much money at all via the sale of advertising, benefits from its own growing presence inside vehicles. According to analysts at the National Traders Association, it has deals in place that have it factory installed in about 70% of new models – giving it an excellent opportunity to convert automobile buyers into subscribers.

But more and more models are also providing internet connectivity, allowing entrée to rapidly-growing Pandora.

According to NTA, Sirius has 24M paid subscribers, compared to only 1M for the more advertising-reliant Pandora service. But Pandora has come 60M total subscribers, giving it a leg up when it comes to the sheer mass of its user group.

The Internet Radio Fairness Act, which figures to be debated in Congress this year after getting an initial hearing in one of the final committee sessions of the 112th Congress, would level the royalty playing field between the two services, giving another huge boost to Pandora.

“Internet-enabled radio in the car has already begun,” Pandora Chief Executive Officer Joe Kennedy said. “It will grow as a snowball, initially small but growing exponentially.”

NTA added, “While Sirius XM receivers have satellites that deliver strong signals and high audio quality, they are still susceptible to disruptions. Satellite radio is also likely to fade due to the widespread availability of faster and better Internet connection in cars. If Sirius XM (and other satellite radio companies for this matter) does not want to be left behind, it needs to reinvent and give in to the online hype.”

**RBR-TVBR observation:** Sirius’ headache is also going to be a headache for broadcasters. Clearly, in-vehicle success enjoyed by Pandora will come out of terrestrial radio’s hide as well as satellite radio’s.

AM-FM radio has one advantage over both Sirius and XM – localism. That’s it, ladies and gentlemen.

There is every possibility that Sirius XM will be able to offer a music mix among its many channels that is closer to any one individual’s taste than a mass-appeal AM or FM station can. But it can’t say word one about what’s happening in the town that individual lives in.

Pandora can provide a dead-on match for a particular individual’s musical taste, but it’s delivery is dry and it too is mute on the local community.

AM-FM can provide music in an entertaining way with special local sauce – and it had better do so in a compelling manner to make sure satellite and internet services cannot wrestle in-vehicle listening away.

Pandora is kicking off the International CES with Chrysler Group joining the roster of automotive brands to integrate it into the dash. With the new Uconnect Access via Mobile, Pandora is streamed through the smartphone, leveraging the sound systems featured in all Chrysler Group vehicles equipped with Uconnect Access.

Chrysler now stands alongside 19 of the top automotive brands in the U.S. and seven leading aftermarket manufacturers that offer seamless Pandora access via the in-dash entertainment system.

In addition to over 175 aftermarket devices, there are now more than 85 different car models that include Pandora with more scheduled to become available throughout 2013. To date, more than 1 million listeners have already tuned in to hear Pandora via these automotive integrations.

Pandora is now available on more than 760 consumer electronic devices – an increase from 450 at this time last year – which enable the more than 175 million registered users to tune in to their personalized radio stations at any time during the day.

## JEEP AND INFINITI JOIN THE HD BANDWAGON

1-17-2013

iBiquity announced after the North American International Auto Show the addition of two more automakers and more vehicles that will offer HD Radio Technology. Jeep and Infiniti announced they would introduce HD Radio Technology for the first time and Chevrolet, Kia, and Lexus all announced new vehicles including HD Radio Technology at the Detroit Show. Here are the other HD announcements from the show.

Chevrolet – Announced that the all-new 2014 C7 Corvette Stingray will offer HD Radio Technology.

Infiniti – Announced that the all-new Q50 will be the first Infiniti vehicle to launch HD Radio Technology as a standard feature.

Jeep – Announced that the Grand Cherokee will be the first Jeep vehicle to offer HD Radio Technology.

Kia – Showed off the all-new 2014 Cadenza, which will be the first Kia vehicle with HD Radio Technology as a standard feature. Kia also had the 2014 Forte sedan on the show floor with HD Radio Technology.

Lexus – Launched the all-new 2014 IS, which will be the first vehicle to hit the roads with HD Radio audio and subscription-free traffic and weather services as a standard feature.

Thirty-one automakers have now publicly announced plans to incorporate HD Radio Technology in 160+ models by year-end with more than 80 models featuring HD Radio receivers as standard equipment.

HD Radio Technology is, or will be available, as a factory-installed feature from 31 automotive brands including, Acura, Audi, Bentley, BMW, Buick, Cadillac, Chevrolet, Ford, GMC, Hyundai, Infiniti, Jaguar, Jeep, Kia, Land Rover, Lexus, Lincoln, Mazda, Mercedes-Benz, MINI USA, Mitsubishi, Porsche, Ram, Rolls-Royce, Scion, SRT (Chrysler), Subaru, Tesla, Toyota, Volkswagen, and Volvo.

Sirius XM Radio ([SIRI](#)) has already accrued returns of 8% in 2013, on the back of another 60% rise in 2012, and is expected to yield another 20% post the earnings announcement.

Pandora Media ([P](#)) is fast becoming a serious challenger for the market, dominating Sirius, with the increased usage of internet as a music streaming option. Can Pandora halt the growth of Sirius or will Sirius continue to grow is the question on the minds of many investors.

### Growth driven by auto

Sirius satellite radios are present in almost 70% of the cars sold in the US, thereby tying its fortunes to the health of the US Auto industry. The fact that the auto industry is their

bread and butter was further evidenced from the [fact](#) that High level executives of the company visited the Las Vegas Consumer electronics show to try and woo automakers.

On the downside, Sirius has relied too heavily on the auto market. About 50 million cars in the US are fitted with the satellite radios, but only around 45% of them actually subscribe to the service.

Sirius has also [announced](#) that it has struck a deal with Toyota which makes Sirius' service a standard fitment across almost all models of Toyota cars. This could prove to be a huge boost for Sirius, even if half the customers subscribe to its service, as is the prevalent case.

### **Competition from Pandora**

The battle for controlling the music streaming market is happening on two fronts. One is on automobiles, where Sirius has been a clear winner, and is actively taking advantage of its dominating position.

The other is on mobile devices, where Pandora has the upper hand with well over 60 million active users. Sirius has also launched its own apps in iOS, Android and Blackberry platforms, but is yet to gain an active user base in the mobile ecosystem.

This suggests that both the companies are on different courses, with each trying to take a chunk out of the other's business.

### **Subscription driven rather than advertisement driven**

Sirius generates its revenues on a subscription based business model. This means the customer pays a fixed subscription price as the access fee for a limited duration. Pandora, on the other hand, generates most of its revenues from advertisements, and only a small share from its subscriptions. Of the total 60 million users of Pandora, only 1 million actually [subscribe](#) to their premium services.

This is another shot in the arm for Sirius as subscription model generates constant revenues, whereas advertisement based model exposes Pandora to a plethora of uncertainties.

### **Pre-earning release And New Guidance**

Sirius announced it expects to meet all its [guidance](#) for 2012, if not exceed some parameters. Consensus estimates that Sirius is expected to report revenue of \$3.4 billion and EBITDA of \$952 million for 2012.

Sirius has given it guidance for 2013 and according to that, it expects revenue of over \$3.7 billion, adjusted EBITDA of over \$1.1 billion, while the consensus estimates put the figures at revenues of \$3.8 billion and EBITDA of \$1.2 billion for 2013.

As the subscription based business model assures a constant stream of revenues, and since the number of customers is also growing steadily, it lends that much more credibility to the guidance given by the company.

### Key Highlights

- Subscribers grew to an all-time high, adding up to nearly 21.9 million by the end of 2011. Another 2 million were added in 2012, and is forecasted to add 1.8 million in 2013
- Over the past 2 years free cash flow essentially doubled to \$900 million
- Revenue was guided to \$3.4 billion for 2012 and 2011 was \$3.0 billion
- Stock up 60% in 2012, and has added another 8% in 2013 already

### Attractive proposition

Sirius has recently [announced](#) that it is being taken over by Liberty Media (LMCA), which is also the largest shareholder in Sirius currently. Liberty has also received permission from the Federal Communication Commission for the takeover, and is expected to complete the transaction in two months.

### Conclusion

Considering its dominant position, recent deal with Toyota, results exceeding expectations, and the recent takeover by Liberty, it can be clearly seen that the stock is headed in only one direction. Out of the 17 analysts following the stock, 12 have rated the stock as either BUY or OUTPERFORM. It is one of those stocks that investors can look forward to soar even higher, this earning season.

## AUDIO) FORD CHOOSES JACAPPS FOR FORD SYNC INTEGRATION



1-7-2012

Monday at CES, Ford announced that jacAPPS will be the recommended mobile app development house for their new Ford Developer Program. What does this mean for radio? It means jacAPPS can help you get your radio station APP integrated with Ford Sync and its voice-activated system.

Ford Sync allows drivers to voice-activate their phone and stored music. Until this announcement, drivers had to fiddle with their phone, and make sure it was properly connected, to get an individual station app to start in the entertainment system. Ford chose jacAPPS to provide development and technical support to third-party developers wanting to create voice-activated smartphone apps for Ford SYNC® AppLink™. jacAPPS Vice President/General Manager Paul Jacobs said, [in our interview](#), this is a significant breakthrough for the radio industry that will allow AM/FM stations to have parity on the vehicle's digital screen.



JACOBS WILL MODERATE A PANEL AT [CONVERGENCE](#) CALLED: "From Mobile Engagement to Cash Register Transactions: How Radio Can Make the Difference." REGISTER [HERE](#)

Jacobs said, "Because of our experience in the radio space, combined with our shared history as Detroit-based companies, a natural partnership quickly developed. From there, identifying a radio partner for our announcement was an easy call. Greater Media, who has iconic radio stations here in Detroit – WRIF, WCSX, and WMGC – as well as great radio brands in Philadelphia, Boston, Charlotte, and New Jersey – was the obvious choice."

Greater Media radio stations that are live in the iTunes App Store and Google Play market with SYNC® AppLink™ functionality include:

Detroit – WRIF, WCSX, WMGC

Boston – WROR, WBOS, WMJX, WKLB, 96.9 FM

New Jersey – WDHA, WRAT

Philadelphia – WMMR, WMGK, WBEN, The Fanatic

Charlotte – WBT-AM, WLNK

"We are thrilled that our radio stations will be easy to find, conveniently connected and seamlessly voice-controlled in Ford SYNC® AppLink™ equipped cars," said Greater Media Chairman and Chief Executive Officer Peter Smyth. "We anticipate being an integral part of the connected car and offering added functionality to our heritage brands."

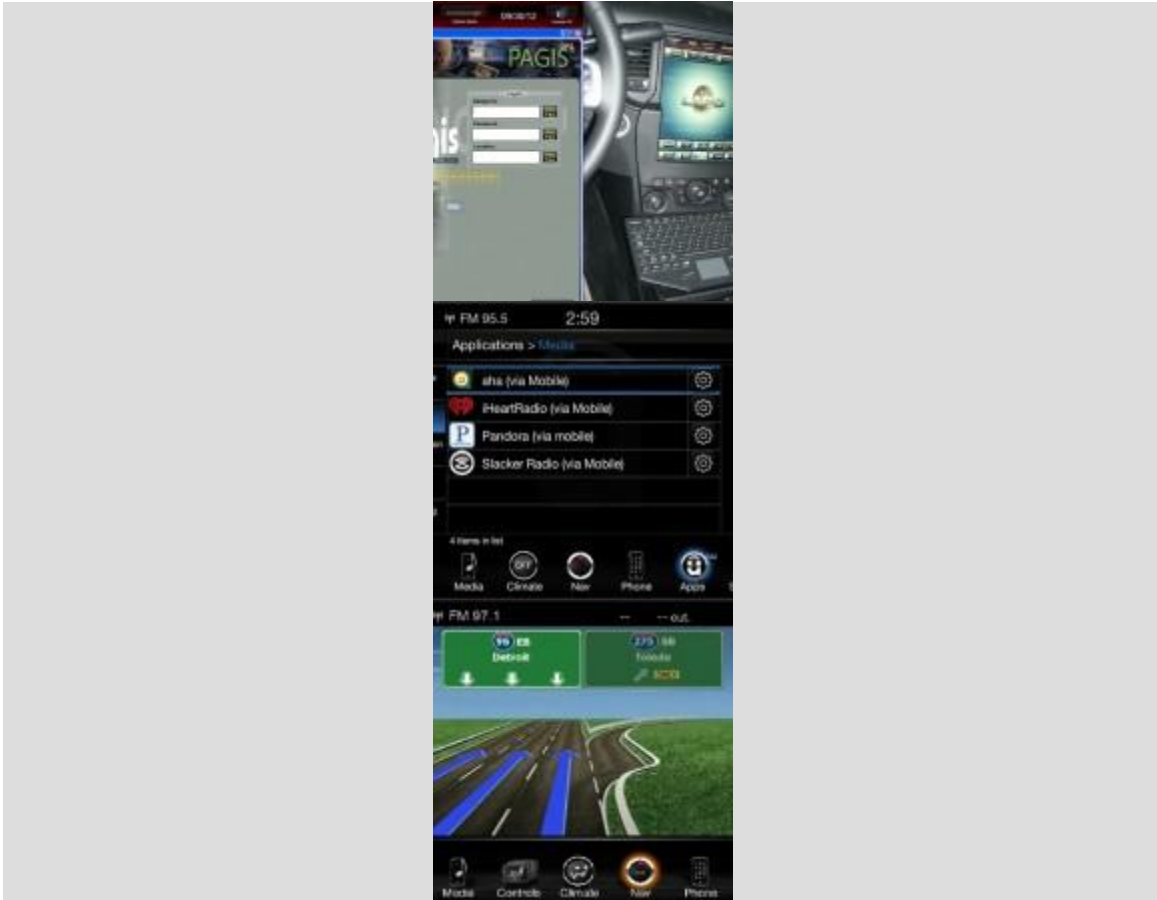
More information can be found at [www.jacAPPS.com](http://www.jacAPPS.com) or at [developer.ford.com](http://developer.ford.com).

## CES 2013: Chrysler Adds Internet Radio and POI Search to Uconnect

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## **CES: GM, Chrysler Cars To Offer Clear Channel's iHeart Radio**

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Keeping up the pressure on [Pandora](#), the radio station giant Clear Channel this morning announced a deal to integrate its Internet-based iHeart Radio service into Chrysler and [General Motors](#) vehicles. The company also unveiled iHeartRadio for Auto, a made-for-driving version of its Internet radio app, which it is offering through a variety of after-market radio vendors.

Clear Channel made the announcements this morning at the Consumer Electronics Show in Las Vegas.



Clear Channel said that starting later this year iHeartRadio will be feature in GM's new app catalog, which will included in some 2014 GM infotainment systems. "GM drivers will have access to a native and easy-to-use iHeartRadio experience directly from their dashboards giving them the ability to personalize their listening experience by searching for both broadcast and custom stations and by using iHeartRadio's exclusive Discovery Tuner to control how much variety they want in their music," Clear Channel said in a statement.

The iHeart Radio apps provides access to 1,500 live radio stations, as well as more than 15 million songs that can be included in user-programmable stations.



A Pioneer radio running the iHeart Radio personalized radio service.

The company also said the service will offer in-dash on select Chrysler vehicles equipped with Uconnect Access Via Mobile, the company's suite of sensible connectivity features. "Once a user connects their compatible Apple or Android smartphone with the Chrysler Uconnect Access App, drivers can control and personalize their iHeartRadio listening experience directly through the dashboard touch screen," the company said.

Clear Channel said iHeartRadio for Auto will offer "a simple, safety-minded user-interface designed to provide seamless access to iHeartRadio's more than 1,500 live radio stations from across the country while in-vehicle." The app will also allow users to create custom stations inspired by their favorite artists or songs. The app is launching today on after-market radios from Clarion, Pioneer and Kenwood.

## The Next App Store Is in Your Car

Auto opens road for new media, ad channelsBy [Tim Peterson](#)

- January 10, 2013, 3:41 PM EST
- [Technology](#)
- 

Cars are increasingly becoming just another connected device. The shift is thanks to in-car platforms like Ford Sync and General Motors-owned OnStar that allow drivers to

make calls, listen to iHeartRadio or check Facebook through their vehicle. Connected cars have been in market for several years, but—like the iPhone—it may be apps that accelerate adoption.

Earlier this week at CES, Ford announced that it would open up Ford Sync to app developers, which should quickly grow that platform's app base beyond its current 63 apps that were built internally or in partnership with companies like Clear Channel's iHeartRadio. And Pioneer Electronics rolled out its AppRadio car stereo that connects with a smartphone to stream car-compatible mobile apps through the in-car dashboard and audio system. An in-car app platform could revitalize the aftermarket automotive industry. Pioneer's vp of marketing, Ted Cardenas, said the brand held a car app hackathon in partnership with SEMA 60 days ago and two of the apps created will be submitted to the app store within the next 60 days. Comparatively it usually takes Pioneer 18 to 24 months to add a new feature to its products.

These apps could unlock another screen for advertisers, even as they continue to grapple with smartphones and tablets. The possibilities abound considering all the new behavioral data the car platforms could unlock like letting Jiffy Lube notify someone when they need an oil change or a nearby supermarket sending a coupon when someone's on their regular route home from work. But not everyone's embracing the opportunity. iHeartRadio has yet to let advertisers target ads to in-car users, though Clear Channel Digital president Brian Lakamp said that his team has spent time looking at the possibility but has nothing to announce right now.

That might be okay for now as the connected car market remains nascent, with auto brands ironing out what kinds of apps they'd like to allow behind the wheel. Brands like AT&T and BMW have run numerous ad campaigns raising awareness of the dangers of texting while driving. That's why manufacturers like Ford plan to be even more stringent than Apple in approving apps for its App Store. "We're not interested in every kind of app but in apps appropriate for the vehicle," said Tony Coopridier, a senior technical leader at Ford.

Of course, safety won't be much of a concern once manufacturers like Audi, Lexus and Google begin to roll out their self-driving vehicles. Then all media and advertising will be on the table, er, dashboard.

## Automakers Try to Balance Connectivity, Safety in the Connected Dash

by Leslie Stimson

on 01.11.2013

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Automakers are thinking about safety and functionality as they look to the future

of designing their big screen infotainment systems.

In one session here at the 2013 International CES on hot car trends, experts said they're thinking about the steps that need to happen between now as automakers demonstrate features like automated parking and the future when the car might actually drive itself.

The car is evolving into the ultimate mobile device that will entertain you, said Thilo Koslowski, automotive analyst for Gartner.

GM Chief Infotainment Officer Phil Abram cautioned that the future is not just about the connected car, but safety too. "A car is 3,000 pounds of metal going at 65 miles per hour. It's not your smartphone."

Koslowski chimed in that some car companies have gotten carried away with putting too much technology in the dash, noting, "The car is not a laptop on wheels."

Apps that consumers can use on their smartphones and connect to the big screen infotainment systems are big news here at International CES. Automakers are opening up development houses for these apps to third-party developers, customizing apps to make them safe for the vehicle.

That's something Livio Founder/CEO Jake Sigal applauds, noting automakers are moving towards developing a common app standard for the car, he said during a car connectivity session. "We realize you don't want an app setting off an airbag. People can Facebook themselves into a tree," he said.

Noting that there's only so much room for embedded apps in the vehicle, the current situation is "getting closer to Velcroing your iPad to the dash," Sigal said.

**As infotainment systems make their way into more vehicles, carmakers strive for a simplified interface.** After a cavalcade of connected car announcements streamed out of the Consumer Electronics Show in Las Vegas this week, radio broadcasters are being forced to contemplate how listeners will experience their products in the "center stack." That's the term automakers use for the interior space running from the driver's right hip up through the center of the cockpit to the bottom of the windshield. As automakers bring more content providers into a space radio once shared only with CD and cassette players, they're striving to make the interface easier to use. This after some drivers complained that certain infotainment systems had flaws or were too complicated. "One of the changes we picked up is a new emphasis on simplicity," Jacobs Media president Fred Jacobs says after surveying the latest systems on display at CES. "They're beginning to realize that while these systems can be crammed with a lot of content, if they're difficult to use it becomes self-defeating." Chia-Lin Simmons, VP of marketing & content at Radio Aha, says the web audio aggregator has attempted to mimic an FM radio interface because it's something most everyone understands how to use. Another trend emerging at CES, according to Jacobs, is the democratization of the connected car. No longer just an option for high-end luxury cars, connectivity systems have made their way into entry level vehicles, like Ford's Fiesta and

Chevrolet's Spark. Ford, for one, sees them as an essential component for entry level vehicles because millennials who buy them are among the biggest users of streaming media. It's also consistent with the automaker's longstanding philosophy to make cars that appeal across a broad-cross section of socio-economic groups. New car sales are expected to remain strong this year but so is the growing market for consumers looking to replace existing car stereo systems. Aftermarket head units supporting internet radio are projected to see sales nearly double, surpassing 2 million units, according to the Consumer Electronics Association

**HD Radio showcases carmaker's acceptance.** Connected cars and a landmark deal to activate FM radio in Sprint smartphones weren't the only radio stories coming out of CES this week. Among the more than 3,250 exhibitors at the Las Vegas Convention Center was iBiquity, which had five HD-equipped vehicles on display representing a cross-section of 2013 auto models and prices. Now that 29 automotive brands currently offer or have announced plans to offer HD Radio, iBiquity says carmakers are focusing on integrating advanced features like iTunes Tagging, Artist Experience and Digital Traffic and Data. More than 20 automotive brands have launched or will offer iTunes Tagging in the upcoming months. Artist Experience, which brings visuals like album cover art to radio screens, is being offered by Volkswagen, Chevrolet, Buick, GMC and BMW. Additional automakers, including Lexus and Toyota, have radios in development with plans to offer the Artist Experience in coming months. Several automakers including Toyota, Lexus and Mitsubishi are planning to use digital broadcasts to receive traffic and data information. "We are excited about the future, as more automakers will soon announce added or expanded HD Radio advanced audio, traffic and data features," iBiquity CEO Bob Struble says. Jacobs Media president Fred Jacobs says HD Radio coming as standard equipment in moderately priced vehicles underscores the "democratization" of technology evident at CES — as well as the importance of broadcasters getting on board with features like Artist Experience. "We continue to hear from automakers about the importance of consumers having a seamless experience when they go from internet radio to satellite radio to broadcast radio," Jacobs says. "The technology is now there for broadcast radio to be on a level playing field with all digital media."

- **Radio revs its way into the digital dashboard at Consumer Electronics Show.** Radio pulled into the fast lane on its way to the automobile's digital dashboard yesterday in a flurry of announcements at the Consumer Electronics Show in Las Vegas. But traffic is getting heavy as content providers race for valuable center stack real estate in new cars rolling off assembly lines this year and next. Partnerships announced at CES increase the ways motorists can safely and easily access broadcast radio streams in the car, whether through web radio aggregators like Clear Channel's iHeartRadio or TuneIn, or by flying solo with their own station-branded app. At least five automakers and six audio content providers announced new partnerships — even before the doors swung open at the CES extravaganza. Chrysler was particularly aggressive, adding iHeartRadio, Pandora, Slacker and Harman's Radio Aha in one fell swoop to its Uconnect Access system. Dubbed Uconnect Access Via Mobile, the upgraded system arrives this year with specific vehicle applications expected to be revealed closer to launch. Subaru, meanwhile, pulled back the curtain on its new StarLink connectivity brand, which offers streaming audio from Radio Aha. "These announcements totally validate how huge the connected car is going to be," Jacobs Media VP/GM Paul Jacobs says. "This is a turf battle. Radio stations have won with Ford [opening its system to individual app developers] but we still have a lot of work to do to get on the screens of other car companies."
- **Aha partners with three more automakers.** Offering one of the web's deepest audio menus, Harman's Radio Aha service streams content from CBS Radio, NPR, Slacker and Rhapsody, along with audio content from news and weather services, magazines, books and Facebook and Twitter feeds. Now its 30,000-"station" menu is being added to Ford Sync, Chrysler Uconnect Access and as an option on Porsche 911, Boxster, Cayenne, Cayman and Panamera model lines. Aha's wider availability means radio will compete with audio content from the likes of from OK!, Men's Fitness, Popular Science,

Parenting, and other magazines, along with kid-targeted programming from classic storybooks, fairytales, bible stories, and educational programs. The service is already available in Acura, Honda and Subaru. Harman says Aha will be installed into vehicles from more than 10 manufacturers representing more than 50% of all cars sold in the U.S. and Canada. Alpine Electronics will become Aha's third major aftermarket partner with the introduction of the ICS-X7HD, its first in-dash app receiver to feature Aha and other connected services, available this March. Aha is also adding a gaggle of new connect providers, including music services AccuRadio, Deezer, Rdio and SomaFM, as well as location-based audio services offering everything from surf reports to alerts on discount offers. "Aha takes the information drivers might look for on a smartphone and puts it in an audio station that is safe to access at 65 MPH," VP of marketing and content Chia-Lin Simmons says.

## TOYOTA PICKS TOTAL TRAFFIC FOR DASH INFO

### 1

1-7-13

Clear Channel's Total Traffic Network and Toyota have announced a three-year agreement that will integrate real-time traffic and The Weather Channel information into the dashboards of select 2013 Toyota and Lexus models. The new Toyota models will feature the first consumer-facing real-time delivery of information and graphics inside a vehicle via an HD Radio signal.

Toyota VP Jon Bucci said, "We are excited about this value-oriented solution for providing important services to our customers. The strengthening of our partnership with Clear Channel Media and Entertainment provides even more in-vehicle experiences by bringing real-time information to our customers."

#### Featured In-Dash Services To Include:

- Doppler weather radar: Drivers will have instant access to The Weather Channel's Doppler weather radar overlaid onto their existing in-dash navigation map.
- Current weather conditions and forecasts: Drivers will be able to easily access The Weather Channel's local and national forecasts for over 120 cities with a touch of the console screen.
- Real-time traffic: These easy-to-understand maps and incident coverage reports are updated every two minutes and offer current conditions, as well as upcoming 15-, 30- and 45-minute predictive traffic information.

Toyota taps HD Radio to bring Clear Channel's Total Traffic Network into the dashboard. The latest evidence that HD Radio's biggest potential for broadcasters may be in data services rather than broadcast programming comes from the Consumer Electronics Show. Toyota announces today at the Las Vegas event that it will use HD Radio to bring Clear Channel's Total Traffic Network and The Weather Channel into the dashboard on select 2013 models. Under the three-year agreement Toyota and Lexus will also become the first to feature real-time delivery of information and graphics via digital radio. Starting with select 2014

models, drivers will be able to see data such as traffic condition maps and Doppler weather radar without requiring a subscription product or requiring any data plan. Toyota VP of connected vehicle technologies Jon Bucci says they're excited to offer a "value oriented solution" to car buyers for getting traffic and weather information into the dashboard. Yet believing the content is enticing enough to car owners, Toyota plans to expand the service coverage beyond the coverage of Clear Channel's 350 HD Radio stations. That will allow drivers with models equipped with the Entune system to have access to the same services by plugging in their smartphone. Clear Channel president of National Media Groups Kevin Dorsey says the agreement highlights the company's ability to leverage its distribution, programming and technology platforms to "bring consumers what they want, where they want it and without annoying subscriptions."

Also, the U.S. consumers are buying 14-15 million new vehicles every year. The total vehicle sales stood at close to 14.5 million in 2012 and are expected to pass 15 million in 2013.<sup>[3]</sup> Over the course of next five years, Pandora will have an opportunity to establish itself in nearly 80 million new vehicles in the U.S.

**Number of connected dashboard devices grows.** The number of dashboard systems that allow drivers to wirelessly connect their smartphone and listen to streaming radio continues to grow. NAB Labs counts 68 models on the market from some of the biggest audio manufacturers, including Alpine, JVC, Kenwood, Pioneer and Sony. NAB Labs says that will have a "significant impact" on radio listening since previous models required car owners to plug in smartphones and iPods using an audio cable. "Advanced Bluetooth allows a wider range of devices to support internet radio and navigation features," it says. Radio will also face more pressure from Pandora. NAB Labs says it counted 98 Pandora-connected models on display at the Consumer Electronics Show last month in Las Vegas. Three manufacturers — JVC, Kenwood and Pioneer — offered Pandora on every connected model they're selling. Even so, NAB Labs found some "connectivity limitations" saying a "significant amount" of Android and BlackBerry smartphones aren't compatible with the connected stereos on the market.

Just because people have access to new technology doesn't mean they are going to use it. There are already a lot of tech features in cars that go unused:

The fascinating thing about these connected TVs is that they mimic the icon/app-driven interfaces and functionality of the tablet and smartphone. The apps for Netflix, YouTube, Amazon, Pandora, even maps and shopping services often take their cues from touchscreens. In fact, the handful of Google TV users out there can enjoy some of their Android apps on the TV screen. And then, of course, there are the ubiquitous Web browsers that are on almost all of these units as well as the over-the-top (OOT) boxes and game consoles. Even the Wii U and many Blu-ray disc players have serviceable browsers.



And the overwhelming majority of owners just don't care. According to the latest research from NPD Connected Intelligence, most of these alternative applications of the TV screen are not being used by the overwhelming majority who have them. In its survey of connected owners, NPD found that generally 5% or fewer were using their TV applications to access Twitter, video calling, shopping or Facebook. Only about 10% are using the TV for Web browsing. The only non-video application that appears to be gaining any traction is music. For obvious reasons (the TV is connected to the home theater in many cases), about 15% are accessing music via their TV in apps like Pandora. NPD Director, Devices John Buffone suggests that with so many inputs bringing connectivity to the TV, consumers are struggling with (or just avoiding) a complex experience

## Radio will soon be just one of several entertainment and information options to the U.S. driver

Posted by: [Paul Maloney](#)



Thursday was the second half of Arbitron's Client Conference, and two topics that emerged of interest to RAIN readers: in-vehicle Net radio and the importance of mobile to radio's digital strategy (as Tom Taylor Now reported on Friday).

It's clear the day is coming that broadcasters will be competing head-to-head with Internet-delivered entertainment and information in the car. Valerie Shuman (left) is VP/Industry Programs for the Connected Vehicle Trade Association. She told the conference we'll soon see, as Taylor reports, "a virtual dashboard and software-defined radio" (think of a device where its capabilities are easily updated and enhanced, as opposed to being limited by whatever "hardware" it uses).

Jacobs Media consultant Fred Jacobs (also pictured left) spoke too. He recommended radio programmers to go and get the same in-car experience your audience will soon have, with a test drive of a car equipped with a connected dashboard system.

"You need to understand what the consumer is going through, to be an effective programmer," he said. That's one point, by the way, of his five-point plan for radio programmers, managers, and owners to make sure they're ready for the "connected car revolution," which he offers in his blog.

"Radio needs to understand what the automakers – and aftermarket companies – are thinking, and how it will impact the listening experience – or should I say – the audio consumption experience," Jacobs writes, [here](#).

Even out of the car, mobile is becoming the heart of digital radio listening. Clear Channel President of Digital Brian Lakamp (right) revealed to the conference audience that more than half of iHeartRadio usage is now mobile (that number is now 77% for Pandora). His company's research shows users of iHeartRadio's "custom radio" feature (its "personalizable" streams) "spent more time with live radio than they did two years ago... digital is 'in addition to,' not 'instead of' broadcast radio."

L.A. Auto Show primes the pump for more HD Radio rollouts. "I Love L.A." may be the tune they're humming at iBiquity this week after a number of car companies announced at last week's L.A. Auto Show new models hitting showrooms complete with HD Radio. The list includes the 2014 Ford Fiesta, the 2014 Subaru Forester and three Mazda models – including one where digital radio becomes standard. Hyundai said its 2013 Santa Fe SUV will become the first model with

iTunes Tagging, while Mitsubishi became the first to integrate HD Radio-based traffic services. iBiquity COO Jeff Jury predicts 2013 will be another year of "tremendous growth" for HD Radio. "Los Angeles is a high profile stage to kick off the auto show season and car makers increased their commitment to HD Radio technology by including us in many important product announcements," Jury says. There are 29 automakers that have publicly committed to HD Radio

## STRUBLE SAYS 2012 WAS A BIG YEAR FOR HD

12-13-2012

iBiquity Digital President & CEO Bob Struble updated the industry on the 2012 accomplishments and general progress of HD Radio which was highlighted by a slew of announcements at the LA Auto Show this month. About 10 million HD radios are now in the marketplace and 2,100 radio stations broadcast in HD. Here's Struble's update to the industry on where HD stands today.

- Acura announced that HD Radio Technology will be standard on the 2014 RLX.
- Ford showcased the launch of the 2014 Fiesta with MyFord Touch and HD Radio Technology.
- Hyundai highlighted the all-new three-row 2013 Santa Fe SUV, which will be the first Hyundai vehicle with the HD Radio iTunes Tagging feature.
- Mazda revealed three new vehicles, all to include HD Radio Technology. The 2013 CX-9 is the first Mazda vehicle to come standard with HD Radio Technology.
- The 2014 CX-5 and all-new Mazda6 will also be available with HD Radio Technology.
- Mitsubishi made a big splash by becoming the first automaker to announce HD Radio delivered real-time traffic information to the dashboard. Mitsubishi becomes the 29th automaker to include HD Radio receivers in the upcoming 2014 Outlander.
- Subaru previewed HD Radio Technology availability on the 2014 Forester.

### **Here is a quick update of the basic facts about the status of HD Radio Technology:**

- Nearly 10 million HD Radio receivers are now in the marketplace.
- A total of 29 automakers have now publicly announced their plans to incorporate HD Radio Technology in over 150 models by year end with more than 75 featuring HD Radio receivers as standard equipment.
- Over 2,100 HD Radio stations have converted to HD Radio Technology.
- Over 1,400 new HD2/HD3/HD4 multicast channels are currently on the air.
- Over 10,000 brick-and-mortar stores and online outlets offer HD Radio products.
- Nearly 100 different HD Radio receivers are available at retail.
- The HD Radio Alliance continues to promote HD Radio Technology on over 600 stations across the U.S. Commercials are available at [hdradioalliance.com](http://hdradioalliance.com).

HD Radio gets its first traffic pickup from Mitsubishi. **Better sound quality may be attractive to listeners, but for broadcasters the potential to monetize digital radio is even more important. HD Radio is taking a step in that direction as Mitsubishi becomes the first carmaker to integrate a digital radio-based traffic service into its dashboard. The 2014 Outlander will be the first model to receive real-time traffic information integrated into its**

navigation system. The content — supplied by the Broadcaster Traffic Consortium (BTC) and Clear Channel's Total Traffic Network — will piggyback on digital radio signals under a deal with navigation system manufacturer Nokia. example of how automakers are leveraging our technology to offer new services to their customers," iBiquity COO Jeff Jury says. Mitsubishi drivers will also have access to the other programming features of HD Radio, including iTunes Tagging. Ibiqity says there are now more than 10 million digital radio receivers in the market, with growth driven by automotive sales

**2020 vision: connected cars predicted to reach critical mass within a decade.** Fasten your seatbelts: within the next 5-10 years, the majority of cars on the road will be connected vehicles, equipped with digital dashboards like Ford's Sync, Toyota's Entune or a similar infotainment system. Connected Vehicle Trade Association VP of industry programs Valerie Shuman made that forecast yesterday at Arbitron's client conference. Pre-loaded with Pandora, Spotify and the like, connected cars mark the end of radio's last sanctuary. But they also afford a rare opportunity to reinvent the radio listening experience for a new generation of drivers. "You've owned that driver for a long time but the in-vehicle platform is changing and it spells opportunity for you," Shuman told the conference. Several industries see the digital dashboard as a new profit center, from consumer electronics manufacturers to content providers to the companies that build the infrastructure. "There's a whole new community interested in car connectivity and encouraging that to happen," Shuman said. It's not just automakers eager to keep up with changing consumer behaviors that are accelerating the trend. Insurance companies want to use the technology to monitor driving habits and use the data to determine which of their policyholders merits a discount. But the real demand is coming from consumers. **More than half of the five million people that bought Sync-enabled Ford systems say it was a major reason they bought the car. The future is arriving fast. Four in ten cars sold last year were connected to wireless networks and 50 car models have web radio integration.** There are 11 million streaming-capable cars on the road today and 90 million cars with auxiliary jacks. Consumer electronics manufacturers are working to standardize the interface in dashboards. "The dashboard looks different and it's changing every year," Shuman said. "It's giving drivers new options."

Next generation Sync will make changing stations easier. **If you think radio listeners are scan-happy today, imagine when all they have to do is yell out “FM 104.1” at their dashboard. That’s all it will take when the updated Sync with MyFord Touch rolls out into additional models in 2014. The automaker says the Ford Fiesta will become one of the first cars to get the new “flattened” audio command structure. Ford says drivers can say the station frequency, “AM 760,” or the official name of the station, like “Z-100,” to tune in. They no longer need to say “radio” or “Sirius” if they’re seeking out a satellite radio station. Other features will also be simplified while the LCD touch screen will be expanded from 4 inches to 6.5 inches. “Technology features are important to all of our customers, including small car buyers,” Ford cross-vehicle marketing manager Michelle Moody says. The automaker says MyFord Touch consistently ranks among the top 10 purchase considerations for new owners, with 65% of consumers planning to buy a Ford saying Sync plays a role in their decision. “We expect the same trend for Fiesta,” Moody says. “We expect the same trend for Fiesta.”**

Toyota makes HD Radio standard on its Yaris line. **Buying a new car with an HD Radio automatically built-in is getting easier — more than 70 models now offer digital radio technology as standard equipment.** The latest to join the list is Toyota’s Yaris brand, starting with the 2013 model year. HD Radio will be offered as part of a dashboard entertainment upgrade on Toyota’s 14 other models. The carmaker also offers HD Radio as standard on all five models under the sister Scion brand. **Ibiquity says drivers can get digital radio as a factory-installed feature on 28 brands**

## In-Car Internet Impact

Have Internet Access in Car: What Do You Listen to Most?

AM/FM on the Radio	70.3%
Local AM/FM Stream	4.6%
Distant AM/FM Stream	4.0%
Other – CDs, MP3, etc.	12.6%
Personalized Music Stream	8.5%



## In-Car Internet Impact

What do You Most Listen to in Your Car?

	<u>Internet in Car?</u>	
	<u>No</u>	<u>Yes</u>
AM/FM Radio	77.7%	70.3%
AM/FM Local Stream	-	4.6%
Total Radio	77.7%	74.6%



## Spends 80% or More of In-Car Time With AM/FM

Those With In-Car Internet 47.8%

Those Without 54.8%

-7.0%



- **HD-equipped Santa Fe goes on sale.** Hyundai already announced that it would install HD Radio on the 5-passenger 2013 Santa Fe Sport SUV and those cars are now on dealer lots. The Santa Fe is the first Hyundai vehicle to offer the iTunes Tagging feature which allows listeners to tag songs for later preview and purchase through iTunes. A larger model Santa Fe with HD Radio will go on-sale in January. HD Radio developer iBiquity — which will feature the Santa Fe in its Radio Show booth this week in Dallas — says 150 cars are now equipped with HD Radio. The company says every 15 seconds a car with a built-in HD Radio receiver is sold. “HD Radio adoption continues its acceleration,” CEO Bob Struble says. Ibiqity will also be showcasing the new Insignia HD-RAD, which is the first tabletop radio that sells for less than \$50.

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- **Inside Radio News Ticker...Lexus expands HD Radio options...**The 2013 Lexus LS will include HD Radio as standard equipment. That brings the total number of Lexus models that will offer the iBiquity technology to five. The car also includes the Lexus Enform digital dashboard that offers app-access to iHeartRadio and Pandora. The Toyota brand also offers HD Radio Technology on most cars and all Scion models include HD Radio as standard equipment...



- Chrysler is teaming up with Sprint to upgrade the maker's Uconnect infotainment system, adding embedded features that will turn the vehicle into a "hot spot on wheels."
- The U.S. automaker was one of the first to offer telematics technology but, in recent years, slipped behind competitors such as Ford with its popular Sync technology. The new Uconnect system will add a variety of features, including voice-operated texting and the ability to connect a laptop computer or smartphone to the vehicle's built-in WiFi hotspot.
- "When we look at the car, we see another smartphone," said Matt Carter, president of wholesale and emerging solutions at Sprint. "And what we're really good at is really innovating customer experiences, devices, underlying platforms and bringing all of those together to create the kind of customer experience that we hope leads toward responsible driving for the passenger and driver."
- Virtually every major automaker now offers some form of telematics system. The challenge is to add features while also simplifying operation – which is why most makers are adopting advanced voice-control technologies. That's also a plus as the industry comes under increased scrutiny from federal safety regulators worried about distracted driving – which is blamed for roughly one of every 11 U.S. traffic fatalities.
- The new Uconnect upgrade permits a motorist to send a text message by speaking in a natural voice while also simplifying the process of entering an address into the navigation system, minimizing the number of prompts required.
- The vehicle also can tap into the Sprint data network and allow passengers to tie in multiple devices, such as laptop computers or smartphones, via WiFi.

- “It is basically providing a hot spot on wheels,” explained Matt Zenios, head of Chrysler’s Uconnect service.
- The Sprint-based system isn’t entirely unique. It integrates a number of features found in other telematics systems, such as the ability to remotely lock and unlock the doors or have emergency responders automatically notified in the event of a crash – both services first introduced by General Motors’ OnStar.
- The hot spot concept, meanwhile, was earlier introduced on the A7 and other Audi models.
- Some of the basic features of the updated Uconnect will be offered without charge. But the hot spot and more advanced services will carry an additional fee, according to Chrysler.
- Chrysler approached a number of telecommunications companies before agreeing to work with Sprint. The two companies won’t discuss the financial arrangements of the deal, however. Motorists will still be able to link phones from other service providers, such as AT&T and Verizon, to the new Uconnect system.
- The updated Uconnect will debut this autumn in the redesigned 2013 Ram 1500 pickup and new SRT Viper models and then be rolled out in other Chrysler products.
- The maker is hoping to lure in the growing number of young buyers who are more keen on electronic technology than traditional automotive selling points like power and performance. But analysts warn that simply coming up with a high-feature telematics system doesn’t guarantee success.
- Ford, for example, has been repeatedly criticized for problems with the MyFordTouch interface used to control its latest telematics system. It was one reason why the Ford Edge was listed by Consumer Reports as one of “Five Popular Cars to Avoid.”

**More HD-equipped cars roll onto dealer lots.** Ford, Toyota and Mazda are among nine automotive brands offering HD Radio as standard or as a factory-installed option in 14 new models that recently hit dealerships across the country – or are about to. HD Radio comes as standard equipment on the 2013 Cadillac XTS, 2012 Hyundai Azera, 2013 Lexus GS, RX and LX, 2013 Scion FR-S and iQ and 2013 Subaru BRZ. It's offered as an option on the 2013 Ford Escape, 2013 Toyota Venza, 2012 Porsche Cayenne, Panamera and 911 and the 2013 Mazda CX-5, the first Mazda to offer it. A total of 28 automakers, including Acura, Chevrolet and Lexus, have now publicly announced plans to incorporate HD Radio in more than 140 models by year-end with more than 60 featuring HD receivers as standard equipment. The recently launched Artist Experience feature is gaining traction with Volkswagen, Chevrolet, Buick and GMC launching radios that display artist images and station logos. More are expected.

## **Survey: Drivers like in-car Internet but worry about safety, privacy**

**Auto makers are now including more connected services in their vehicles and trying to balance them with safety**

By Fred O'Connor | *03 August 12*

U.S. drivers seem to hold conflicting opinions on in-car Internet access, viewing the technology as a driving hazard and even a threat to privacy while praising the entertainment and safety features it offers.

These opinions, presented in a Harris Interactive [poll](#) released Wednesday, come as automakers are seeing increased driver demand for digital technology and are adding more of it to their vehicles.

More than three out of four (76 percent) of the survey's 2,634 respondents answered that in-car connectivity causes too much

distraction and is dangerous to have in vehicles. Automakers have gone too far in including this technology in their vehicles, according to 55 percent of those surveyed. U.S. drivers tend to attach strong emotions to their vehicles, and the poll reinforced that view, with 61 percent of people saying their car is "a haven from the outside world" and they don't always need an outside connection.

The auto industry said it understands the technology's potential safety risks and incorporates it in a way that creates the fewest disruptions. Integrating a smartphone into a car reduces the distractions that would be present if the phone was simply placed in the passenger seat, said Wade Newton, director of communications for the Alliance of Automobile Manufacturers (AAM), an automotive trade group whose 12 members include Ford, Mazda, Toyota and General Motors.

"If the phone rings you have to reach over, grab it and see who's calling," he said. "If it is integrated, with one button they can accept the call, turn down the radio and open the speakers."

Integrated mobile phone use was an early example of in-car connectivity. Now the technology can turn vehicles into wireless hotspots, allow people to search the Web from dashboard touchscreens and connect to roadside assistance services by pressing a button.

All auto makers have introduced in-car connectivity features in some degrees and promote them on their websites. When asked to comment on the survey, though, some of the manufacturers declined to comment and others did not respond to interview requests by deadline.

BMW USA did reply to an interview request but could not comment on the survey. However, in an emailed statement, the company said that interest in safe motoring "is a healthy sign that consumers are concerned about distraction while driving, and we consider that a big success."

The statement added that BMW uses "science-based analysis" to incorporate smartphones and other in-car technology into its vehicles. "We have 5 driving simulators that are constantly evaluating the

driver experience, plus we do mobile driver clinics in Europe, the U.S., and the Far East to assess driver reactions," the company said.

Car connectivity could provide companies with too much information on a person's location and how they drive, according to 61 percent of those polled. The survey showed 41 percent of respondents believe insurance companies would raise rates based on driving habits.

Car makers only share data if drivers opt in to such services, said Mark Boyadjis, an industry analyst at IHS Automotive. Auto makers' legal departments understand that sharing driver data without consent is illegal, he added.

Those who sign up for safety services, such as General Motors' OnStar, and question why they're being tracked miss the point of such systems, he said.

"If you sign up for stolen vehicle location and you don't want to be tracked, that's the whole idea behind the system," he said. "It's to make sure you can find your car when it's stolen."

Car manufacturers started offering [connectivity features](#) a few years ago, in some cases partnering with technology companies to develop the systems.

Ford turned to Microsoft to develop its Sync platform, which debuted in 2007. Among other functions, certain Sync packages include an in-car wireless router and let drivers use voice commands to control selected mobile phone apps.

At the Apple Worldwide Developer Conference in May, Apple revealed that vehicles from nine automakers will incorporate the Siri voice command system found in its [iOS 6 mobile platform](#). According to Apple, the Eyes Free feature will allow drivers to use the voice command button on their steering wheels to ask for Siri's help with getting directions, playing music, writing text messages and placing calls in addition to other functions.

Other consumer-focused applications and Web services are also making their way into cars. Toyota's Entune system, launched last year, brings mobile applications including the Bing search engine,

Pandora and the OpenTable restaurant reservation service to a range of its vehicles. Honda's recently revamped car connectivity platform, HondaLink, uses cloud computing to stream music, news and entertainment content to drivers.

While drivers harbor concerns about the effect of Internet access on road safety, the survey indicated that they enjoy the features it offers. Nearly 60 percent of those polled (58 percent) said these technologies make driving more enjoyable. Almost the same percentage (57 percent) said in-car connectivity makes them feel safer.

Technology has changed how people connect, and this extends to their autos, the AAM's Newton said.

"Drivers have this expectation of what it is they're going to do in a vehicle," he said. "It's our job to provide ways for them to do those things in a way that is safe as possible and keeps the eyes on the road."

As better user interface technologies make their way into cars, auto makers are better able to meet these expectations, said Boyadjis. Car companies long wanted to include the Pandora music streaming service in their vehicles, but its "setup requires more than a basic display" and developing the proper interface proved challenging, he said.

Now, with touchscreen displays and voice recognition appearing in cars, those technology integration hurdles have diminished. The interface required to use Pandora "is no different from what you would have on any other touchscreen navigation system," he said.

Drivers both embrace and fear in-car connectivity systems, because current cars offer technology not found in recent models and this presents a learning curve, Boyadjis said.

Cars from the 2000s had "rotary knobs and basic controls," he said. "That doesn't exist anymore. We've reached a level where we've got a more complex system that has software elements to it and a more complex user interface that people have to learn."

To help educate people, vehicle makers are now including car tech tutorials at their dealerships, Boyadjis said. Ford, for example, teaches buyers how to use the Sync system. Cadillac is offering courses on its new Q system and Lexus is following suit, he said.

Regardless of a driver's technology comfort level, everyone needs to take the time to understand their car's technology.

"It doesn't matter if you are an expert or a novice. There is still a learning curve," Boyadjis said. "Getting into a vehicle is no longer about buckling your seat belt."

**7/12 "In the next year or two we're going to see cars with services that **redefine technology**," *GigaOM* comments.**

**But connecting to the web** may be a problem. Most car systems now rely on **smartphones**, but others take a different approach. The **Tesla Model S** (pictured above), for example, connects directly to the web -- no smartphone required. It will also come with **TuneIn's web radio directory built in to the dashboard's whopping 17" touchscreen** (and also happens to be TuneIn's 200th distribution platform).

**Still, such systems** -- regardless of how they get online -- run into the same issues of **data costs** and **network capacity**. While "the jury is still out" on such issues, *GigaOM* writes ([here](#)), "it's clearly a **platform of interest** to carriers."

**Toyota Entune upgrade to put iHeartRadio in more cars.** Several months after Toyota was to have updated its Entune dashboard system, allowing drivers with earlier versions of the infotainment system to **use iHeartRadio**, the upgrade is now promised to arrive by summer's end. Drivers of a larger selection of Toyota cars will also be able to access the MovieTickets.com and OpenTable apps that were also promised for Entune, as well as new voice control functions.



Drivers are already able to use the Pandora and Bing apps. Toyota first announced in January 2011 that it would begin phasing iHeartRadio into its digital dashboard system. “The ability to bring more music choice to Toyota owners with iHeartRadio is one of the reasons for the wide appeal of Toyota Entune,” VP of advanced technology Jon Bucci said last fall as it was announced the radio app would be in 2012 Camry and 2012 Prius V models.

#### PERCEPTION #4: Consumers will want more pre-sets with in-dash systems

Finally, we addressed the common perception that consumers will want to program many more channels on their dashboard as more and more choices are made available there. To test this proposition, we presented streamers with a mock dashboard that might appear on a new factory-installed system. It provided ten “slots” to be programmed. We asked them to select the ten inputs they would program if they had this system installed in their car.

The choices presented included a phone input, a dozen or so local radio stations, a continuous traffic channel, a continuous weather channel, input for your iPod or digital music library, Pandora, iHeart radio and a Facebook feed.

Interestingly, most selected only about five options. That is, when presented with ten positions to program, most only cared about enough sources to fill five of those positions. These findings are consistent with research conducted on consumer interest in programming FM pre-sets in the 1980s concluding that most consumers only had interest in programming five FM stations.

When we aggregate the selections of today’s streaming radio users, we see that the most common choice is the phone and one FM radio station. That’s followed by an input for the consumer’s digital music library, a second FM station and Pandora.

The picture that emerges is that consumers are only likely to program five positions on a new in-dash system, despite the availability of many more choices and programmable positions. Furthermore, there only appears to be interest in one or two FM radio stations. Terrestrial broadcasters who do not want to be crowded out of the new connected dashboard should work extra hard at building their brands now and fight for position.

**4/12 J.D. Power: More than half would purchase HD Radio in their new vehicle.** A new J.D. Power and Associates survey turns up a high degree of purchase intent for HD Radio in the car — if the price is right. More than half (52%) of vehicle owners surveyed said they “definitely” or “probably” would purchase HD Radio as a feature in their next vehicle, according to the research firm’s latest survey of interest and purchase intent for emerging automotive technologies.

That places HD Radio at the top of the survey, which measures interest in a feature after the price is revealed. In that category, HD out-performed other higher-ticket features, such as a \$750-priced enhanced collision mitigation system (46%), a \$300 wireless connectivity system (45%) and a surround-view rear-vision camera (44%), going for \$550. HD Radio didn't rank in the top five when the price of the feature wasn't revealed. Fielded in March, the survey covered 23 technologies and is based on responses from more than 17,400 vehicle owners

## 7/12 **HondaLink: New Infotainment System to be Introduced in 2013 Honda Accord**

We recently caught a glimpse of the 2013 Honda Accord, which led us to believe the next-gen car would feature a new infotainment system. The [spy shots revealed Pandora radio](#) and new controls, but Honda just revealed HondaLink, its new cloud-based infotainment system.

Co-developed with Aha by Harman, [Honda says the new system](#) provides all the benefits of a smartphone without the distractions. Through the use of what it calls an intuitive interface, HondaLink's setup brings a variety of apps such as Yelp and Slacker Radio, as well as audio books, podcasts from NPR, and destination-oriented content to the cockpit. Through the use of steering-wheel-mounted controls, in-dash controls, and voice commands, drivers can have their Facebook and Twitter feeds read aloud so they're always in

the know while they're on the go. HondaLink will also incorporate Pandora and the voice-to-text SMS texting that was introduced in the 2012 CR-V.

Although the Fit EV is essentially the first Honda to use the new telematics system, that low-volume hatch uses an embedded telematics control system. The upcoming 2013 Honda Accord plug-in hybrid will also feature a version of the HondaLink EV, which the automaker says will allow drivers to remotely view the car's state of charge and initiate charging. The latest version of HondaLink, which will appear in the refreshed Crosstour after the 2013 Accord, works via tethered smartphones. Drivers with iPhones can connect through a USB port, while Androids use [Bluetooth](#). Honda also says the system requires few software updates, and that drivers may soon have the ability to connect an iPad in their vehicles. It's not clear whether HondaLink will come standard in the new Accord; we'll just have to wait to find out.

**More HD-equipped cars roll onto dealer lots.** Ford, Toyota and Mazda are among nine automotive brands offering HD Radio as standard or as a factory-installed option in 14 new models that recently hit dealerships across the country – or are about to. HD Radio comes as standard equipment on the 2013 Cadillac XTS, 2012 Hyundai Azera, 2013 Lexus GS, RX and LX, 2013 Scion FR-S and iQ and 2013 Subaru BRZ. It's offered as an option on the 2013 Ford Escape, 2013 Toyota Venza, 2012 Porsche Cayenne, Panamera and 911 and the 2013 Mazda CX-5, the first Mazda to offer it. A total of 28 automakers, including Acura, Chevrolet and Lexus, have now publicly announced plans to incorporate HD Radio in more than 140 models by year-end with more than 60 featuring HD receivers as standard equipment. The recently launched Artist Experience feature is gaining traction with Volkswagen, Chevrolet, Buick and GMC launching radios that display artist images and station logos. More are expected.

Apple wants automakers to add Siri "Eyes Free" button to steering wheel.

by [Paul A. Eisenstein](#) on Jun.11, 2012

More and more [cars](#) now work with iPhones. Now Apple wants to do more work inside the car.

It's hard to find a [new car](#), these days, that doesn't offer a USB port. Make that a USB port specifically equipped with the specific cord designed to link an iPhone or some other Apple device to your vehicle infotainment system.

Based on plans announced by Apple at its annual software developer's conference it appears Apple wants to grab a spot on the steering wheel, as well.

While your recent-model car likely already has a button to activate its voice command system its replacement might very well feature a second button to wake up Siri. That's Apple's proprietary voice command system that can help you do anything from plug a destination into your [navigation system](#) to find the best synonym for "corporate arrogance."

In the Know!

Apple is calling the button "Eyes Free," according to the tech website Engadget. And it appears the button would only operate an iPhone or another Apple device equipped with Siri – which is soon expected to include an update version of the Apple iPad.

Cadillac's new CUE system already uses some of the basic software as Apple's Siri system.

Tapping the Eyes Free button would allow you to access all manner of apps and functions directly on your i-device, rather than the car's infotainment controls – but because more and more vehicles are tightly paired with iPhones that might allow you to load a music service like Pandora or some other app. It would certainly help you find the nearest Apple store or Starbucks.

According to Engadget quoting Scott Forstall, the czar of Apple's iOS operating system, a long list of manufacturers have already signed on, including Audi, BMW, Chrysler, General Motors, Honda, Jaguar, Land Rover, Mercedes-Benz and Toyota, and Eyes Free could start showing up in some vehicles by about this time next year, most likely making it the big technology news for the 2014 model-year.

What about folks using Blackberrys, Androids or Microsoft-powered phones? They'd likely be out of luck unless automakers opt to make the Eyes Free button serve a dual purpose – something that the demanding Apple is not likely to accept without a fight.

Significantly, the list of maker's opting in does not include Ford which turned to Microsoft to develop its popular Sync technology. Also absent is Kia, which also is running a Microsoft-powered infotainment system.

Hyundai, meanwhile, is also off the list, apparently focused on expanding the market for its Blue Link system.

But more surprising is the fact that GM is pairing up with Apple despite the potential conflict between Siri and the OnStar system. Meanwhile, Cadillac is just launching a high-function infotainment system, dubbed CUE, that happens to incorporate some of the basic Siri software. The big difference is that CUE does not reach out to the "cloud," but is a fully self-contained system – though, like Siri, it is able to respond to common language commands, rather than requiring users to learn strict command trees that might require

four or five steps to do something as simple as pairing a Bluetooth-equipped phone.

Another new feature is the addition of handsfree tweeting, which Apple explains as being able to "tweet just by talking to your phone." That's being introduced alongside a new [Eyes Free](#) feature, which places a button on car steering wheels to let you activate Siri without having to hunt around for your phone. Nine car companies' logos were flashed on the screen behind the stage: BMW, Mercedes-Benz, GM, Jaguar, Land Rover, Toyota, Audi, Honda, and Chrysler. The new cars featuring this Siri button are expected to be available within the next year.

And if all that's not enough, Apple's newly introduced [turn-by-turn navigation](#) will integrate Siri commands as well, including the eternally-popular "are we there yet?"

**4/12 Automakers signal need for radio to keep pace with evolving digital dashboard.** With 28 automotive brands covering 142 models committed to installing HD Radio, the technology built to move AM/FM radio into the digital era is finally pulling out of the driveway. According to iBiquity estimates, 10% of new cars sold last year included HD, 20% will have it this year and the percentage will grow to 40%-50% of new cars sold by next year.

**More automakers expected to integrate Artist Experience.** With Chevrolet and Volkswagen committing to install Artist Experience-enabled radios in their cars, broadcasters are beginning to incorporate the technology. More than merely displaying visual elements tied to programming and commercials, the technology, when paired with an ISP back channel, can allow consumers to get a discount or coupon, access directions or participate in a text to win contest. Greater Media and Clear Channel have agreed to add Artist Experience, with Clear Channel committing hundreds of stations.



**4/12 J.D. Power: More than half would purchase HD Radio in their new vehicle.** A new J.D. Power and Associates survey turns up a high degree of purchase intent for HD Radio in the car — if the price is right. More than half (52%) of vehicle owners surveyed said they “definitely” or “probably” would purchase HD Radio as a feature in their next vehicle, according to the research firm’s latest survey of interest and purchase intent for emerging automotive technologies. That places HD Radio at the top of the survey, which measures interest in a feature after the price is revealed. In that category, HD out-performed other higher-ticket features, such as a \$750-priced enhanced collision mitigation system (46%), a \$300 wireless connectivity system (45%) and a surround-view rear-vision camera (44%), going for \$550. HD Radio didn’t rank in the top five when the price of the feature wasn’t revealed. J.D. Power executive director of global automotive Mike VanNieuwkuyk says drivers remain “very interested” in technologies that make their car safer, but he says they’re turning their attention more toward features and technologies that “allow them to be productive, connected and entertained while in their vehicles.” Not unexpectedly, purchase interest declines across all features when a price is introduced. For example, 68% indicated intent to buy a wireless connectivity system pre-price but the percentage dropped to 45% after the market price was revealed. Fielded in March, the survey covered 23 technologies and is based on responses from more than 17,400 vehicle owners

**4/12 HD:** There are about 7 million radios in the marketplace, mostly in cars, and 2,100 radio stations in 250 markets now on the air in HD. In another first, 2013 will be the first model year that Ram has offered HD Radio to its customers. Chrysler will carry the new radios exclusively for a year.

### **Another pair of vehicles add HD Radio to their head units.**

Another automaker is giving HD Radio the opportunity to compete in the digital dashboard. Mazda’s 2013 CX-5 will be the first model from the Japanese automaker with HD technology as an option. Mazda brings to 23 the number of automotive brands where HD Radio is or will be available as a factory installed feature. Others include Audi, BMW, Ford, Jaguar, Kia, Lexus, Lincoln, Mercedes-Benz, MINI USA, Subaru, Toyota, Volkswagen and Volvo. Meanwhile Hyundai announced this week that HD Radio will be offered as standard

equipment in its 2012 Azera model. Available in dealerships 2012, the new Azera joins the Equus, Genesis and Sonata, which already offer HD Radio.

HD penetration into auto market is expected to be 20-30% by 2012 and 40% by 2013. HD will really ramp up in 2012 with Ford, Toyota, GM launching. Chrysler will launch in 2013. **Coming soon- Live pause and bookmarking where you can store info on music products or info heard.** iBiquity says digital radio is or will be available as a factory-installed feature on 23 brands.

## New HD Radio Technology is or will be available on these models in 2011:

AUDI	FORD	JAGUAR	LINCOLN	MINI	VW
A4	E-Series	XJ	MKS	Cooper	CC
A5	Edge	XK	MKT	Clubman	Eos
A6	Escape	XF	MKX	Convertible	GTI
A8	Explorer		MKZ		Jetta
Q5	Expedition		Navigator		Passat
Q7	F-Series				Tiguan
	Flex	<b>KIA</b>		<b>ROLLS ROYCE</b>	Touareg
	Focus	Optima		Ghost	
	Fusion	Sorento	<b>MERCEDES-BENZ</b>	Phantom	
	Mustang	Sportage	C-Class		
<b>BMW</b>			CL-Class	<b>SCION</b>	<b>VOLVO</b>
1 Series			CLS-Class	xB	C30
3 Series		<b>LAND ROVER</b>	E-Class	xD	C70
5 Series		LR2	GL-Class	iQ	S40
6 Series		LR4	G-Class	tC	S60
7 Series		Range Rover	M-Class		S80
X3	<b>HYUNDAI</b>	Range Rover Sport	R-Class	<b>SUBARU</b>	V50
X5	Equus		S-Class	Forester	XC60
X6	Genesis	<b>TESLA</b>	SL-Class		XC70
Z4	Sonata	Roadster	SLK-Class	<b>TOYOTA</b>	XC90
				Vehicles to be announced	



LINCOLN  
AMERICAN TRUCK



Please visit your local auto retailer for specific model/availability information.

Approximately 50%-60% of autos sold today have RDS capability. The digital messaging is displayed concurrently on the radio display with the airing of the commercial. RDS has a 64 character capacity (about ½ of Twitter) to send text such as advertisements. At the time it was first introduced, this was thought to be too short for useful messages, but in the modern era of “Tweeting” this is no longer the case

## RDS – Combining Sight & Sound

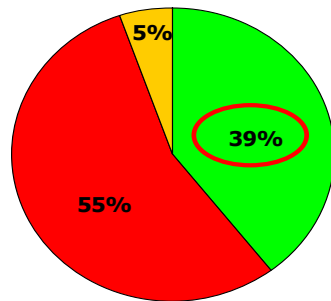


- Custom messaging for in-car Radio Data Systems (RDS) that runs simultaneously with on-air spots featuring the same messaging.
  - E.g. Wawa was promoting hot turkey meals, the RDS Message was: \$2.99 – Hot Turkey – At Wawa
- Combining RDS messaging with on-air messaging increases listener unaided recall an average of +23%.

# Nearly 2 in 5 listeners have PAD display in vehicle, with 9 out of 10 paying attention to it at least occasionally



## Radio Information Display (PAD) in Vehicle



■ Yes  
■ No  
■ I'm not sure/Don't currently have vehicle

How often do you notice the information displayed? (Base: Among those whose vehicle has capability, n=1,034)	
Regularly or Often	60%
Occasionally	31%
Rarely or Never	9%

Q.12 Does your vehicle's radio/stereo system have the capability to display the artist name/song title/album for a particular song that is playing or other messages from the radio station?

Base: Total Respondents

Q.13 How often do you notice what information is being shown on your vehicle's radio or stereo system's display?

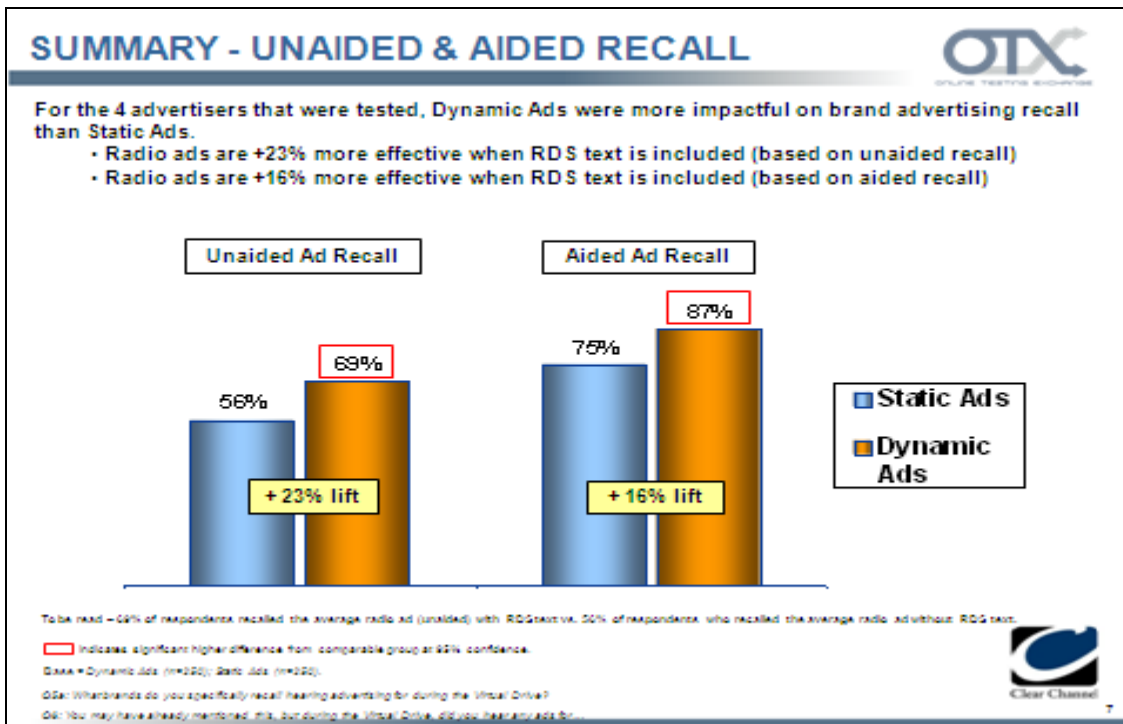
Base: Vehicles Radio/Stereo System Has Capability To Display Artist Name/Song Title/Album/Other Messages (n=1,034)

© 2008 Starcom MediaVest Group

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Source: GM/Starcom Research, 2008.

OTX conducted a study in 2009 that confirmed the added impact of running an RDS message concurrently with the airing of the commercial. It confirmed the results of earlier RDS research conducted by Satellite radio which was also done with OTX---it dramatically enhances recall.



**4/12 Jacobs Media survey finds nearly half are plugging their phones into the dashboard.** Jacobs Media's Techsurvey8 found one-in-ten respondents (9%) drives a car with a digital dash, and among them 48% have connected their smartphone or mp3 player to the dashboard (equates to 4.5% of U.S.).

Fans of news-talk and sports formats were more likely to turn to their phone seeking streaming content. Those figures may grow with smartphone penetration, which among those surveyed by Jacobs had already reached majority (52%) status. Pandora was the most-used streaming app, followed by iHeartRadio, Spotify, TuneIn and Slacker.

Techsurvey8 results were gathered online from January 31-February 15 from listeners of 170 broadcast stations across the U.S. and Canada, contributing 57,358 total respondents.

**Automakers signal need for radio to keep pace with evolving digital dashboard.** With 28 automotive brands covering 142 models committed to installing HD Radio, the technology built to move AM/FM radio into the digital era is finally pulling out of the driveway. According to iBiquity estimates, 10% of new cars sold last year

**included HD, 20% will have it this year and the percentage will grow to 40%-50% of new cars sold by next year.** Automakers are getting on board. Volkswagen began adopting Artist Experience last fall. Chevrolet announced earlier this month that it will add Artist Experience-enabled HD Radio as a standard feature, starting with model year 2013, on all its vehicles when each undergoes a redesign. **During closed door meetings with radio executives at the NAB Show in Las Vegas, iBiquity CEO Bob Struble showed a video of technology executives from major automakers talking about how radio technology needs to evolve to remain in step with consumer expectations of the evolving digital dashboard.** The message from automakers has consistently been that digital is becoming the price of entry to the dash, that they're looking for ways to differentiate their products with interactive entertainment that enables consumers to pause, tag, time-shift, and customize content. "The good news is that the automakers we're working with believe that HD Radio checks those [consumer expectation] boxes," Struble says. "These guys believe that radio's local focus and free aspect remains very relevant. They see radio as having huge strengths but see a need to upgrade to meet consumer demand."

**More automakers expected to integrate Artist Experience.** With Chevrolet and Volkswagen committing to install Artist Experience-enabled radios in their cars, broadcasters are beginning to incorporate the technology. **More than merely displaying visual elements tied to programming and commercials, the technology, when paired with an ISP back channel, can allow consumers to get a discount or coupon, access directions or participate in a text to win contest.**

**Fact: Ford reports brisk sales for cars featuring HD Radio-equipped digital dash.** Digital radio may not be the primary reason why sales of cars equipped with Ford's Sync and MyFord Touch dashboard entertainment systems are growing, but the net result is the trend puts more HD Radios on the road.

**3/12 Sound quality and data delivery potential drive Toyota to HD Radio.** **"Data services and sound quality are the two primary reasons why we looking at continuing with the proliferation of HD Radio,"** says Jon Bucci, vice president of advance technology for

Toyota U.S.A. He says the automaker is looking at digital radio as a way to beam content like weather, sports and stocks into the car — similar to what Sirius XM Radio does today by aggregating various

## Consumers That Stream Also Listen To FM In Cars

By Jennifer Lane on February 27, 2012

Nearly 40% of smartphone owners (**16% of U.S.**) have used their device to listen to a streaming music service while in their car, according to new research by NPD Group on automotive connectivity. Devices and ways to connect them have become a serious focus for the auto industry. 79% of car owners are using a digital device in their cars.

It appears at this point that streaming in the car is used to supplement listening to traditional radio – according to **NPD's Ben Arnold**, seventy three percent of drivers report still using their FM radio “always” or “most of the time” during car trips (supports knowDigital's findings) while more than half (57 percent) of vehicle owners say a CD player is vital in their decision to buy a car stereo or entertainment system.

### Radio's push button simplicity is looking better and better:

Now Consumer Union takes Ford and the other manufacturers to task in **Connected Cars: A New Risk**. Devoting five pages of their annual car issue to the subject, they declared:

The control systems in many models—the way you operate the audio, climate, navigation, and other systems—are becoming needlessly complicated.

### Consumer Reports concluded that:

Any system that requires drivers to take their eyes off the road for too long or engage in unnecessary distractions can be dangerous.

And voice recognition systems don't seem to be the answer.



University of Utah researchers found that even systems using speech increased driver reaction time by 30 percent

In a side-bar called [Controls Gone Wild](#), Consumer Union points out that for a ***parked*** Ford Focus it took a ***trained*** human-factors engineer six steps and 11 seconds to just launch an iPod.

On a BMW it took the engineer six steps and 10 seconds to manually tune the radio.

On a Hyundai Equus it took the engineer only five steps and 5 seconds to choose a radio station preset.

**In other words, the safest audio task you can do with these complicated infotainment centers is tune to one of your regular analog radio stations.**

And of course its safer, takes even fewer steps, and less than 2 seconds to do the same thing on a regular radio, a point made by Consumer Reports.

### **Broadcast Radio's position in the auto is *not* in jeopardy**

The math is simple: 12-13 million new cars are sold annually in the U.S., with more than 200 million cars on the road. Strategy Analytics predicts 22 million cars will be Bluetooth-enabled and 17 million will be WiFi-enabled by 2017. This leaves more than 160 million cars on the road that will not be "wired" in 2017 – 5 years from now.

To assume wireless technology will negatively impact listening to broadcast radio is to ignore the lessons of the past and key facts of the present. In-car music alternatives have existed for years. And radio is already competing -- and winning -- in two highly "wired" environments, the home and the workplace. Broadcast radio dominates both locations with a 50% share of all audio listening.

Some are also under the impression that all radio streaming is done to the online pureplays. According to Ando Media, approximately 25% of online listening is to broadcast radio streams, and we expect that to rise as broadcasters refine their digital and streaming offerings for a couple of reasons.

Many Internet audio offerings resemble the automated FM music machines of the 1970s. After some initial success listeners soon wanted more than just one song after another then, no matter how well researched the music might have been.

Broadcasters are now competing in the “custom” arena. CBS, with last.FM allows listeners to create their own stations as does Clear Channel via iHeart.

The CD and Internet pure-plays all provide just one thing -- music. More than 20% of all in-car audio usage goes to CDs and satellite radio and as a result, we expect CDs and satellite music stations will end up competing most directly with wireless in-car technology. Over the next five years, it's likely to become increasingly difficult to find two things: cars sold with CD players and those willing to pay for music in a wireless world.

What's more, many of the new audio units being rolled out by the automakers will come with HD receivers. Like satellite radio, HD radio penetration and listening will be driven by the automobile. The technology is now being embraced by 28 OEMs across 142 different models, and the sound is terrific. It's free and provides formats not available on broadcast radio, with fewer ads than Pandora. 2012 will be big year for HD penetration, with 30% of all new cars sold coming equipped with HD. 40-50% of all cars sold next year will have HD. content partners. Toyota thinks over-the-air broadcasters may be

able to do the same. “We’re in development right now for a future product with those capabilities,” Bucci said.

As digital audio hardware becomes available in the auto we believe that broadcast radio’s listening will actually increase. These projections do not include the positive impact on broadcast radio assets when they begin to compete in the “custom” arena.

# 2017: Projecting digital audio alternatives impact on terrestrial radio: Using Strategy Analytics Projections for Wireless & Bluetooth Auto Penetration

Audio Results Taken from Nielsen's October 2009 Audio Study

	In-Home		In-Car				At Work		Other	
	Observed Listening Minutes	Current Share	Observed Listening Minutes	Current Share	2017 Projected Radio Share by Device	Adjusted Minutes Based Upon Projected 2017 Share of Listening	Observed Listening Minutes	Current Share	Observed Listening Minutes	Current Share
Broadcast Radio & Streams	17,144	46.4%	25,802	74.2%	74.6	25,953	9,125	53.8%	7,079	23.3%
Satellite Radio (all)	2,668	7.2%	1,929	5.5%	3.5	1,218	2,090	12.3%	2,346	7.7%
CD	7,629	20.6%	5,634	16.2%	14.2	4,940	685	4.0%	5,664	18.6%
Digital Audio Stored on Computer	3,253	8.8%	128	0.4%	0.4	139	847	5.0%	832	2.7%
Digital Audio Streamed on Computer	2,459	6.7%	-	0.0%	0	-	2,137	12.6%	70	0.2%
Portable MP3/Audio via Smartphone	3,178	8.6%	1,252	3.6%	7.2	2,505	271	1.6%	1,185	3.9%
Other Audio (unspecified)	610	1.7%	45	0.1%	0.1	35	1,795	10.6%	13,198	43.4%
[Total Audio]	36,940	100.0%	34,789	100.0%	100	34,789	16,950	100.0%	30,383	100.0%

Total (all Locations)	
Terrestrial Radio Current usage/Minutes	59,150
Terrestrial Radio 2017 Usage/Minutes	59,301
Terrestrial Audience Audience Loss due to WiFi/Blue Tooth by 2017 due to new in-car wireless technology	0.3

Source: Katz Analysis.

A 2011 study from knowDigital, a digital media research firm, finds that 14 percent of Americans listen to streaming radio in their cars on a regular basis -16% in the NPD 2012 study. What's interesting about the study is that it also concludes that streaming radio actually does not constitute a threat to traditional radio in either the short or long term. These “early adopters” are heavy consumers of audio media- The Alan Burns Study, ARB Edison came to the same conclusion. They are listening to broadcast stations as well as streaming ones- supplemental listening. Also of note: In-car streamers aren't necessarily heading for Pandora when they connect. Many are using their cell phones to plug into the internet and stream their **hometown** radio stations, and they're doing so even when they're many miles away from home. It also should be emphasized that the streamers

that were interviewed in this study generally turn on AM/FM radio first when they get in their cars. If media planners and buyers want to find a mass audience they will need to continue to focus on the big brands in the radio space.

Alan Burns released details of his second annual national study of women in 2011. 2,000 females between 15 and 54 were interviewed. The study found that 69% of women who have in-car internet still listen to radio all or most of the time they're in the car. "It's important to note why these women choose radio over non-radio streams in their cars" Burns continued, "and the big reasons are that radio ***provides energy, excitement, and local information.***

## Daily TSL to Radio

	Total Sample	Broadband in Car
On a Radio	2:00	1:45
Online	:30	:45
On Phone	:15	:30
Total	2:45	3:00