

15/01/15

# Future Mobility Newsletter

Issue 15.01



## From auto manufacturing to mobility services

The 2015 Consumer Electronics Show was once again attended by over one hundred thousand people looking to discover the next great thing. Over the last few years, the show has attracted some of the most innovative prototypes and concepts created by the auto industry.

At this year's show, Daimler's CEO, Dieter Zetsche, delivered a keynote, during which the Mercedes F015 electric driverless concept car was introduced. It can only be described as one thing: [luxury in motion](#).



Mark Fields, Ford's CEO, gave a morning keynote at CES during which he introduced Ford Smart Mobility and the [25 mobility experiments](#) that the company will be undertaking in cities around the world.

According to Fields, four megatrends are shaping the way Ford sees the future:

- increasing urbanization
- rapid growth of the middle class
- issues of air quality and related health risks from congestion
- changing consumer attitudes and priorities.

Combine these megatrends with three enablers (*connectivity* [in two years, 80% of world's population will have a smartphone], *software and sensor technology* and *big, smart data*) and Ford sees a major opportunity for innovation and a "higher purpose", as Fields explains.



The 25 described experiments fall into three categories:

- *creating a better customer experience*
- *developing more flexible user-ship models for customers*
- *connecting with every customer in a socially collaborative and rewarding way.*

Many of the experiments to be undertaken relate to vehicle sharing and many involve electric vehicles. Fields also mentioned “user-ship” experience, multimodality and the company’s priority “in making the first Ford autonomous vehicle accessible to the masses” although Fields does expect the first driverless vehicles to be available in five years.

He spoke about **shared** and **electric** as well about **autonomous** and **multimodal**. Fields also talked about making mobility information accessible to consumers through their smart phones. Doesn’t this remind you of the SEAMless™ Mobility model that has been promoted by the Transportation Evolution Institute?

The megatrends identified by Ford are clear to everyone in the mobility space. The combination of population growth, urbanization, an aging population, millennials’

relative disinterest in vehicle ownership / driving and finally, the congestion and pollution issues faced by most cities would make any auto manufacturer and transportation planner realize that a more sustainable transportation system is required.

Strained government finances in most countries means that limited resources can be invested toward new road infrastructure. As Fields stated, “the existing infrastructure for motor vehicles simply cannot sustain the sheer number of vehicles expected to be on the road in the coming years”.

Given a low vehicle utilization rate (average of 4%) means that vehicles can be shared. The growth of an increasingly urbanized population means they HAVE to be shared.

Despite Fields’ continued emphasis on a “higher purpose”, we are all aware that auto

manufacturers are in business to deliver a strong return to shareholders. It is fantastic to see that at least some of these auto OEMs are recognizing that a strong ROI will not necessarily only come from auto manufacturing but from an expansion into other areas of mobility.

In the future, surviving auto manufacturers will need to adjust to the new mobility ecosystem and become mobility service providers. Such mobility services may include operation of car sharing programs, ride sharing services and mobility insurance.

Will today’s auto manufacturers, seeking to generate revenue from activities other than vehicle manufacturing, look to expand their operations into areas that are currently the domain of transit properties? How will governments react in such situations?

## AT THE FOLLOWING EVENTS / AUX ÉVÉNEMENTS SUIVANTS

JP Arcoragi et P. Ducharme présenteront à la **Commission parlementaire - transports et environnement**, à Québec, le 23 janvier 2015

P. Ducharme sera conférencier à l’événement **Comment verdir votre flotte & vos profits**, à Québec, le 5 février 2015

P. Ducharme will be speaking at **Greening your fleet & your profits**, on February 12th, 2015 in Cambridge, Ontario

Y. Provencher will be speaking at the **PIT Conference** in Toronto, February 25th & 26th, 2015

Y. Provencher will be speaking at an event in Stockholm, Sweden on March 18th, 2015: **Towards Intelligent Cities and Transportation Management**

C. Kargas sera conférencière au **50e Congrès et Salon des transports : PROCHAIN ARRÊT! de l’Association québécoise des transports (AQTr)**, qui aura lieu du 30 mars au 1er avril 2015 au Palais des congrès de Montréal

C. Kargas will be speaking at the **Smart and Healthy Municipal Public Transport International Conference**, April 21-22nd, Pilsen, Czech Republic

C. Kargas will be speaking at **Climate Change Technology Conference**, May 25-27, 2015 in Montreal | C. Kargas sera conférencière à la **Conférence sur les technologies du changement climatique**, à Montréal, du 25-27 mai 2015

C. Kargas & P. Ducharme will be speaking at Canada’s premier electric mobility event, **EV2015VÉ**, May 25-27th, 2015, in Halifax, Nova Scotia | C. Kargas et P. Ducharme seront conférenciers à **EV2015VÉ**, 25 au 27 mai 2015 à Halifax, Nouvelle Écosse

For a free subscription or additional information | Pour un abonnement gratuit ou plus d’information :

Catherine Kargas: [ckargas@marcon.qc.ca](mailto:ckargas@marcon.qc.ca)

Pierre Ducharme: [pducharme@marcon.qc.ca](mailto:pducharme@marcon.qc.ca)

# In the news | Les nouvelles

## ► Data Driven Insurance ... by Ford

The newsletter's editorial focused on Ford's 25 mobility projects, announced by CEO Mark Fields. One of these projects relates to insurance. Fields asked the CES audience to consider what it would be like to own "a database of [their] driving behaviour for all of the years since [they] got their driver's license". He continued: "what if this driver score passport could go with you from car to car, no matter the brand? Imagine that you could share that data with insurance companies to get better rates".

For this particular project, that will take place in London, Ford will collect driver data from a large fleet and assess how they "could use driver profiles to personalize insurance rates".

It looks like insurance is also part of the "mobility services" that Ford is considering as it repositions itself from an auto manufacturer to something more as it branches into related areas.

We know that in the US, Ford is working with State Farm in a number of areas. In May 2012, we learned that the two companies "[teamed up](#) to track drivers for cheaper insurance rates". At the end of 2013, Ford [announced](#) that it was working with State Farm and the University of Michigan on autonomous vehicle research.

If the experimental project in London meets the company's expectations, how long before it is introduced into the US? Will State Farm be involved in such work in the US or will Ford, in an attempt to expand its mobility services forward integrate into the insurance space? In a world of shared driverless vehicles, could Ford be considering self-insuring or providing mobility insurance to the customers it will have a relationship with?

## ► Creative car sharing programs and their impact on insurance

Audi recently announced its [UNITE](#) program which lets participants choose up to 4 people with whom to share a lease, using beacons and mobile apps for tracking usage, scheduling and coordination. How would this work from an insurance perspective?

## ► Google & auto insurance

Google, which already offers auto insurance online the the UK, could soon be [selling auto insurance](#) in the US. Rumours have spread about the company purchasing [CoverHound Insurance](#). If this foray into US auto insurance materializes, will Google limit itself to auto insurance or expand into home and ...?

## ► Driverless prototypes & concepts

The last few weeks have been exciting for those following driverless technology, with Google [unwrapping](#) "the first real build of [their] self-driving vehicle prototype". This prototype follows the early mockup unveiled in May 2014.



And on the other end of the driverless spectrum, Daimler introduced its [Mercedes-Benz F015](#). CEO [Dieter Zetsche](#), during his 2015 CES keynote, talked about a vehicle that gives the consumer what is lacking most in the 21st Century: time and privacy.



Both electric vehicles (recognizing the importance of moving to electric propulsion), both driverless but two completely different vehicles that will deliver very different experiences.

## ► Tesla's automatic charger

If driverless vehicles are going to be predominantly electric, they will need to recharge without human intervention. Could Tesla be preparing for such a future with the development of an automatic charger that "moves like a [solid metal snake](#)"?

## ► CA DMV: Delay in delivery of 1st set of rules for deployment of driverless vehicles

The [California Department of Motor Vehicles](#) missed its 2014 year end deadline to adopt new rules for driverless vehicles. The reason: regulators need to figure out how they'll know whether these vehicles are safe. DMV has "three options: It could follow the current U.S. system, in which manufacturers self-certify their vehicles; it could opt for a European system, in which independent companies verify safety; or the state could (implausibly) get into the testing business.

## ► New Jersey joins the driverless club

"The state Senate [passed legislation](#) sponsored by Senate Republican Leader Tom Kean to make New Jersey a hub for the development, testing and implementation of driverless vehicles."

# In the news | Les nouvelles

## › Which auto OEM will partner with Google?

Last year, Google's Chris Urmson indicated that the Silicon Valley giant was [seeking auto industry partners](#) "to bring its vision of a self-driving car to market with the next five years". And now, we read that Google has [begun discussions](#) with most of the top auto manufacturers (including GM, Ford, Toyota, Daimler and Volkswagen) for such an "alliance". In fact, just a few days ago, [GM's Chief Technology Officer](#) was quoted as saying "we'd certainly be open to having a discussion with them". Such a "partnership" would have numerous benefits for both Google and the auto OEM but control over the technology is just one of the big issues that will need to be ironed out. Another is the vision of autonomy. While Google objective is to deliver a fully driverless (Level 4 autonomy) vehicle to consumers, many of the auto manufacturers (for obvious and self-serving reasons) would prefer to keep the driver in the loop (Level 3 autonomy). If a deal is struck, it could certainly help in meeting the 2020 driverless vehicle commercialization objective that many players have been referring to.

Speaking at the Detroit auto show, Chris Urmson stated that he does not believe that NHTSA will stand in Google's way and that the company's outlook for fielding a fully driverless car on public roads is probably [5 years](#) - but that's the forecast for sunny California. When can we expect to see these vehicles in Canada and other nordic climates?

## › CES: autonomy, car sharing, car swapping, keyless access to vehicles and more

At CES, numerous manufacturers showed off their advances in autonomy, including [Bosch](#), [Audi](#), [Valeo](#), [BMW](#) and [Delphi](#). For its car sharing DriveNow, BMW also introduced a new [MasterCard credit card](#) that makes on demand car sharing even easier. The card communicates with vehicles using near field communications, allowing users to just get into the cars and drive away. The card is a key for the car. No additional identification requirements because the card already contains all that information.

Keyless access to vehicles was also demonstrated by Audi as it unveiled a [smartwatch](#) to unlock your car.

Ford announced a [car swapping](#) experiment, to be undertaken in Dearborn MI, that is aimed at allowing people to use the right vehicle for the right job.

## › Incentivizing the uptake of autonomy

Surveys and studies undertaken in recent months have focused on the interest in and potential uptake of autonomous vehicles. At the [Institute of Car Fleet Management's annual conference](#), that took place at the end of last year, delegates were told that the government "should incentivize the uptake of autonomous vehicle technology in the same way it subsidizes ultra-low emission vehicles". Given the environmental and safety benefits of this technology, could this be the way that penetration will be increased?

## › Car sharing and its impact on auto sales

[ARK Investment Management](#) estimates that "a rise in car sharing to 5% of all journeys could almost halve US auto sales". Given the rapid expansion of car sharing programs around the world, it is understandable that auto manufacturers are interested in expanding into car sharing and other mobility services.

## › NYC taxi medallion values: drop of 25%

Another sign of the disruption in mobility business models brought about technology is the most recent news about NYC taxi medallion values declining by [almost 25%](#) compared to a year ago.

## › 12 million driverless cars/yr by 2035

BCG study estimates that fully driverless cars "could make up nearly 10% of global vehicle sales, or about [12 million cars a year by 2035](#)". These estimates may need to be reconsidered in a context of shared driverless vehicles. What's even more interesting is that according to this same study, 44% of US drivers "would consider buying a fully autonomous vehicle within the next 10 years".

## › Nissan & NASA join forces on driverless

"NASA and the North American arm of Nissan have announced that they are to [join forces](#) on the development autonomous vehicle technology."

Interested in daily updates on future mobility? Check out the following:

Intéressé par des mises à jours quotidiennes sur la mobilité du futur ? Visitez le site suivant :

<http://www.scoop.it/t/evolution-of-transportation>