

# SMART DRIVING CARS

<http://smartdrivingcar.com/FY17Budget-021116>

**Thursday, February 11, 2016**

**BUDGET**  
OF THE U.S. GOVERNMENT

**Budget of the U.S. Government, FY 2017**

Feb. 9, "... (3) Accelerate the integration of autonomous vehicles, low-carbon technologies, and intelligent transportation systems into our infrastructure....

- Providing almost \$400 million on average per year in funding over the next 10 years for the deployment of self-driving vehicles. Investments would help develop connected infrastructure and smart sensors that can communicate with autonomous vehicles, support R&D to ensure these vehicles are safe and road ready, and expand at-scale deployment projects to provide "proving grounds" for autonomous self-driving and connected vehicles in urban and highway settings.

[Read more](#) *Hmmmm...major victory...not only: "...for **autonomous self-driving...**", but that's also stated before: "... and **connected...**".* *Alain*

**The  
New York  
Times**

**Step Toward Approval for Self-Driving Cars**

Reuters "...The National Highway Traffic Safety Administration told Google of its decision in a previously unreported Feb. 4 letter to the company posted on the agency's website this week. Google's self-driving car unit on Nov. 12 submitted a proposed design for a self-driving car that has "no need for a human driver," the letter said...." [Read more](#) *Hmmmm...Major decision!* *Alain*



### [Tesla slams the brake on Autopilot in urban areas](#)

C. Osborne, Jan 11, "Tesla is updating the Autopilot system present in Model S sedans to prevent hands-free use in urban areas after a series of recorded near-misses and dangerous driving forced CEO Elon Musk to revisit the issue.

On Sunday, the automaker's chief executive revealed the update in a third quarter earnings call. Musk said the upgrade was taking place as a response to videos posted on media streaming site YouTube showing a series of near-misses caused through the use of Autopilot. To prevent injuries from occurring due to the technology, functionality may have to be restricted to stop drivers doing "crazy things," according to Musk...." [Read more](#) *Hmmmm...Of course... See [stupid video](#).*

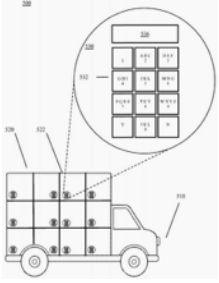
*Alain*



### [Uber Drivers in New York City Protest Fare Cuts](#)

M. Santora, Feb 1, "... New York City just keeps getting more and more expensive," Mr. Sherpa said at the rally. "How are we supposed to survive with less money?" "They call us partners," he added. "But they're treating us like slaves."..." [Read more](#) *Hmmmm...How badly does Uber want driverless car technology to become a reality!! As if the business case wasn't already a no-brainer. Alain*

## QUARTZ [Google wants to deliver packages from self-driving trucks](#)



M. Murphy, Feb 9, "Look out, Amazon. A new patent awarded to Google today suggests that the search giant is looking into developing self-driving delivery trucks, just as Amazon readies its autonomous delivery drone fleet..." [Read more](#) *Hmmmm...[US Patent Myllymaki](#) . Really??? This is patentable? And why does it have a conventional cab in the front? A better idea would be a cab-less box with headlights, taillights and wheels that carries compartments that are only openable with a proper electronic key enabled at the appropriate delivery location. In all seriousness, these have a better chance of being the first driver-less vehicles to share our public streets with our current conventional vehicles. They'll never have people in them! Plus, they don't need to be bigger than the current Google Car to substantially outperform Amazon's Drones. Alain*

## **FORTUNE** [Google Is Sending Self-Driving Cars to Washington](#)

K. Korosec, Feb 3, "Google is expanding its self-driving car project to Kirkland, Wash., a city that allows the company to test its driverless vehicles in a wetter environment...hinted that Google was preparing to enter into [four more U.S. cities](#) with its self-driving cars." [Read more](#) *Hmmmm...More progress! Alain*

## **theguardian** [London looks to get in driving seat for Google autonomous car tests](#)

Feb 5, "London transport chiefs are in "active discussions" with Google in an attempt to convince the company to trial its driverless cars in the capital. Isabel Dedring, the deputy mayor for transport, said officials met with Google recently to encourage the technology company to extend its pilot scheme to London. It would be the first time Google's autonomous cars have been tested extensively outside the US..." [Read more](#) *Hmmmm...It very much depends which part of London, but this could be a real challenge and its not only about driving on the "wrong side" of the road. Alain*



## [Arctic testing ecosystem for intelligent transport opens in Finnish Lapland](#)

Feb 11, "A world-class Arctic testing ecosystem for intelligent transport systems (ITS) and automated driving, known as 'Snowbox', is being built in Finnish Lapland. Led by the Regional Development Agency for Fell Lapland, the key members involved in the planning and implementation of the Aurora project are: the Finnish Transport Agency; Finland's Ministry of Transport and Communications; the Finnish Transport Safety Agency - Trafi; the National Land Survey of Finland; the Finnish Meteorological Institute; ITS Finland; HERE; Roadscanners Oy; and Lapland Proving Ground.

[Read more](#) and [see video](#) *Hmmmm...Very interesting. Alain*

## Media Centre

The official Media Centre for Jaguar Land Rover

## [Jaguar Land Rover to Road Test Future Technology on the UK's First Connected Corridor](#)

Feb 1, "Jaguar and Land Rover is investing in a 41 mile 'living laboratory' project on UK roads to develop new Connected and Autonomous Vehicle (CAV) technologies. The new CAV test corridor, which includes 41 miles of roads around Coventry and Solihull, will be used to evaluate new systems in real-world driving conditions. The £5.5m 'UK-CITE' (UK Connected Intelligent Transport Environment) project will create the first test route capable of testing both vehicle-to-vehicle and vehicle-to-infrastructure systems on public roads in the UK..." [Read more](#) *Hmmmm...Great, but now the UK is calling this Connected and Auto...I guess they haven't heard that the notation has changed to: "Auto.. and Connec...". However, this effort seems to be focused on Connected. :-( Alain*

**[Humans](#)**

A. Davies, Feb 5, "CAR CRASHES KILL more than a million people each year, and roughly 90 percent of them are the result of human error. That's the strongest argument for developing self-driving cars: Humans are lousy drivers. Coolly logical robots, the thinking goes, will far exceed us. The irony of that is the best way to program those robots to drive may be to program them to drive more like humans. The UK is studying this very idea as part of "Move-UK," an \$8 million, three-year project intended to bring self-driving cars to market, on the double.

The researchers see three potential advantages to making robo-cars ape human habits. A robot that behaves more like a human driver could provide a sense of familiarity with the technology and reassure passengers who might be reluctant to surrender control. It could blend into and interact with traffic. And it might be more suited to handling situations where human intuition can be more useful than fixed algorithms..." [Read more](#) *Hmmmm...There is no such thing as "a human human driver". There is a broad distribution of human drivers. The driving algorithms should mimic only the best central core of that distribution with the choice of the implemented behavior be left to the owner (or possibly the user) of the the self-driving vehicle. Alain*

## Some other thoughts that deserve your attention

**The  
New York  
Times**

**[Senators Call for a Much Broader Recall of Defective Takata](#)****[Airbags After a Recent Death](#)**

H. Tabuchi, Feb 2 "The steering wheel in the 2006 Ford Ranger belonging to Joel Knight. He was killed in December when the vehicle's Takata airbag ruptured after he ran into a stray cow in South Carolina....Over the weekend, [The New York Times reported](#) the circumstances surrounding Mr. Knight's death and risks posed by not

yet recalled and unrepaired vehicles with Takata airbags." [Read more](#)  
*Hmmmm...We need to be really careful and really good to, of course, avoid as many of these as possible but to also respond instantly as we discover what we didn't know about SmartDrivingCars. Alain*

## On the More Technical Side

<http://orfe.princeton.edu/~alaink/SmartDrivingCars/Papers/>

## Recompiled Old News & Smiles:



[Hyundai: Ryan Reynolds everywhere Ryan Reynolds is the most appealing -- and omnipresent -- man on earth in Hyundai's new Super Bowl ad](#) <https://youtu.be/lh4VYnbn6Sw>

*Hmmmm...At least Hyundai had a responsible Super Bowl ad, in contrast with Audi's "outdated irresponsible muscle car revival". The market for a 205 mph car is about as large as the number of Apollo astronauts, each about as old and none anywhere near as bright. [MASHABLE'S The Best SB 50 Ads](#) Alain*

## Half-baked stuff that probably doesn't deserve your time:

**The  
New York  
Times**

[How to Build a Streetcar That Works](#)



Y. Freemark Feb 10 "... But taking a stand in favor of these measures is vital; without them, the streetcar will be too slow to provide improved transportation for the people who need it, and it will attract too few

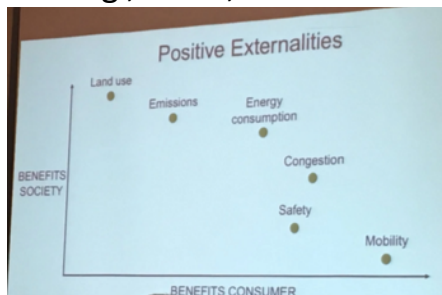
riders to justify its construction. Devoting more room on our streets to the streetcar and, just as important, to buses, is a policy Mayor de Blasio, and other municipal leaders, would do well to champion." [Read more](#) *Hmmmm...So bad! Please realize that by the time any of the above is done, we'll have the opportunity to provide aTaxi mobility to Brooklyn that will completely "Blockbuster" street cars and fixed route buses even before any Mayor has a chance to cut the ribbon on what is being proposed here. Sorry! Alain*

## **appleinsider** [Apple Maps vans operating around the clock in run-up to 'iOS 10' debut](#)

A. Staff, Feb 11, "With Apple widely expected to announce improvements for its in-house mapping effort alongside "iOS 10" this summer, the company's fleet of sensor-laden vans continues to ply the streets — even at night...Apple officially [acknowledged](#) the maps data program last June. The company now provides a [listing of locations](#) where the vans are expected to appear in the immediate future." [Read more](#) *Hmmmm...Is this really the way to collect digital map info? Wouldn't customer sourcing be much more effective, timely and financially efficient??!; however, when you have more cash than God, why not! Alain*

## **The Washington Post** [Why you should buy a driverless car, in 1 chart.](#)

B. Fung , Feb 5, "...The chart was produced by James Anderson.



[Read more](#) *Hmmmm. ... Not to quibble, but... the axes are not independent since society is the ensemble of consumers! So the benefits to society are essentially identical in measure as the benefits to consumers; so the dots should lie on a 45 degree line in such a chart. I do agree that driverless technology's (aTaxis) ability to enhance mobility, improve safety will deliver substantial benefits to consumers, and thus society. Its ability to deliver ride-sharing without compromising on-demand point2point mobility will then*



*eliminate congestion and improve land-use while substantially reducing the need for energy and its environmental consequences. Alain*



## [Status of the Dedicated Short-Range Communications Technology and Applications Report to Congress](#)

Final Report—July 2015 FHWA-JPO-15-218 "A. Staff, Feb 11, "... USDOT has synthesized expectations and preliminary plans into a candidate roadmap to guide industry and public agency implementation efforts. It offers three key milestones for the year **2040**:

1. 90 percent of the US light duty vehicle fleet is DSRC enabled;
2. 80 percent of all traffic signals are DSRC equipped; and
3. DSRC exists at up to 25,000 additional safety-critical roadway locations.

The roadmap is predicated primarily on a **market-driven scenario** wherein applications are provided by industry for consumer adoption and public agency implementation...." [Read more](#) *Hmmmm...There is no mention anywhere in the report of any benefits of DSRC in its initial stages of adoption. So why would consumers begin buying this technology? In fact, until market adoption surpasses 70% DSRC's availability in safety critical situations isn't better than a coin flip, let alone its ability to impart altered driving such that the impending collision is sufficiently mitigated. Thus, the "market-driven" predicate has no opportunity to even get started, let alone gain sufficient momentum to achieve a 70% penetration level. The house of cards collapses. DSRC is DoA. This report is an obituary for DSRC. Alain*



## [Self-Driving Cars Will Rely on Vehicle-to-Vehicle Communication Technology First](#)

M. Ottolini Feb 10, "...National Highway Traffic Safety Association administrator Mark Rosekind spoke at MIT on the realities of self-reliant vehicles, and said the ability for vehicles to communicate with one another in an instantaneous fashion is crucial to ensuring the safety of passengers...." [Watch video](#) *Hmmm.... So bad.... 1st the title is misleading (nothing about V2V being "First") and while there is no*



*argument that "...Connected vehicles give you "further lines of safety"...", one should point out the "lines" are infinitesimally thin improvements over independent autonomous safety and the cost is enormous. Also, what is all of this ego about "the human needs to be "**front-center**". I sure hope this unleashed a healthy discussion; else, So Bad, MIT! Alain*

**C'mon Man!** (These folks didn't get/read the memo)

**FORTUNE**

**Transportation Secretary Says Hyperloop**

D. Morris, Jan. 30, "U.S. Transportation Secretary Anthony Foxx said Friday that the Hyperloop, a futuristic transportation concept involving levitating pods, may be a candidate for research funding from his department..." [Read more](#)

*Hmmmm...Really??? Whew!! Even though [Beach built one in 1869](#) in NYC and it operated until 1873, it still deserves a [C'mon Man!](#) Alain*