

SMART DRIVING CARS



<http://smartdrivingcar.com/Hollywood-050716>
[Saturday, May 7, 2016](#)



[Beverly Hills to Develop Autonomous Vehicles](#)

M. Walker April 15, "The Beverly Hills City Council voted unanimously this week to adopt a resolution to develop driverless vehicles that will provide public transportation throughout the city.

The program is part of Beverly Hills mayor John Mirisch's plan for a municipally owned fleet of autonomous vehicles that would function as an on-demand car shuttle service to and from any address in the city. .." [Read more](#) *Hmmm...Communities all around the nation should follow what BH, Austin and a few other communities are doing. There is an opportunity to begin on-demand shared-ride "21st Century Public Transit" mobility using volunteer drivers to initiate and thoroughly demonstrate this low-cost mobility in preparation for a massive roll-out that can take place once driverless cars can extend/replace the volunteer drivers. [Staff report on the matter](#); [another article](#); [landing page for the program](#). Alain*



[The driverless truck is coming, and it's going to automate millions of jobs](#)

R. Peterson, Apr 25 "A convoy of self-driving trucks recently drove across Europe and arrived at the Port of Rotterdam. No technology will automate away more jobs — or drive more economic efficiency — than the driverless truck. Shipping a full truckload from L.A. to New York costs around \$4,500 today, with labor representing 75 percent of that cost. But those labor savings aren't the only gains to be had from the adoption of driverless trucks. Where drivers are restricted by law from driving more than 11 hours per day without taking an 8-hour break, a driverless truck can drive nearly 24 hours per day. That means the technology would effectively double the output of the U.S. transportation network at 25 percent of the cost....

Yet the benefits from adopting it will be so huge that we can't simply outlaw it. A 400 percent price-performance improvement in ground transportation networks will represent an incredible boost to human well-being. Where would we be if we had banned mechanized agriculture on the grounds that most Americans worked in farming when tractors and harvesters were introduced in the early 20th century? [Read more](#) *Hmmm...This IS a tough one. ("millions" might be overstating it, but it is non-trivial. How many MBA jobs has Msft's Excel put out of work?) The economic forces are really big here and technologically this is very doable. In fact, railroad intermodal services have been putting drivers out of work for years. If the RRs really got*

their act straight, they could TODAY do most of what is proposed above. This is a tough one! The answer may lie in retraining and then using the driver to perform corporate services other than driving while he/she accompanies the freight down the road. Since the cab of a truck could now become an office work-space, in many ways better than many cubicals occupied by other white collar professional (they have windows and often beautiful scenery). Maybe not so tough!
Alain

iTech Post [Tesla Motors Autopilot Feature Previews Driverless Future](#)

V. Thompson, May 2, "Tesla Motors' Autopilot data previews suggest that the company's first step toward self-driving is already significantly reducing accidents on the highway...According to the data accumulated so far, with **Autopilot on** the probability of having an accident is **50 percent lower**...."

[Read more](#) *Hmmm...I have no reason to doubt the claim; however, I certainly would love to do an independent analysis of the data because the policy implication of this finding is so poignant: Our highway transportation system is **unnecessarily unsafe!** Demonstrated, on-the-shelf technology can **substantially** improve that safety whose incremental cost (to the consumer) (or its availability) does not deter the purchase of the underlying product (even without Madison Avenue and Insurance weighing in to promote this add-on feature). This safety improvement is being achieved without public sector (NHTSA, DoTs, DMVs) involvement or appropriation of public funds. While even better technology may lie ahead (as the next article proclaims), "safety officials" (whose other data point is that death went up 8% while VMT went up only 3.5%) would be foolish (and potentially liable) if they were to impeded the roll-out to and broad adoption by the motoring public of this and/or similar safety technology. Alain*

THE VERGE [Volvo autonomous car engineer calls Tesla's Autopilot a 'wannabe'](#)

J. Golson, Apr 27, "While Tesla says its technology is Level 2 autonomous — a combination of two technologies designed to make driving easier — some automotive industry experts, including Ford CEO Mark Fields, believe Autopilot is a Level 3 technology. That means it's designed to take over "safety-critical functions" from the driver. That's my impression from testing the system on a long road trip last month. Trent Victor, senior technical leader of crash avoidance at Volvo, ...Victor says that Volvo believes that Level 3 autonomy, where the driver needs to be ready to take over at a moment's notice, is **an unsafe solution.**" [Read more](#) *Hmmm...What are they arguing about?? Something that exists and demonstrates that it reduces crashes by 50% is unsafe?? This deserves a [C'mon Man!](#)!! Alain*

The New York Times [Are the Solutions to Distracted Driving Really What We Want?](#)

J. Kitman, May 2, "...The self-driving features in today's cars are safety advances that allow carmakers and technologists to let everyone bring their phones into their cars...a variety of partial solutions to the hazards of distracted driving." [Read more](#) *Hmmm...At least they are partial solutions and they aren't wont be expensive. Who is asking for the "trillion-dollar-plus"? Certainly not Google, Apple, Baidu and anyone that is making all of this happen. Only people*

asking for this are those that are vying for the "high-speed" trains and the ITS/connected gizmos. Alain

INVESTOR'S BUSINESS DAILY [Google Inks Driverless Car Pact With Fiat Chrysler](#)

Alphabet's (GOOGL) Google and Fiat Chrysler Automobiles (FCAU) have inked a deal to collaborate, with Fiat Chrysler putting Google's self-driving car technology into 100 of its Pacifica minivans, the companies announced Tuesday afternoon...." [Read more](#) *Hmmm...What happened to Ford (...By teaming up to promote regulations that favor fully-autonomous vehicles, Ford and Google may be moving toward closer cooperation on the actual development of driverless models...)? Seems strange. Just for a minivan (see next article)?! Alain*



[Google to Get Fiat Chrysler Minivans for Self-Driving Tests](#)

B. Vlasic, May 3, "...But that dynamic changed markedly on Tuesday, when Google said it would expand its testing of autonomous vehicles by installing its technology in a fleet of minivans made by Fiat Chrysler...No financial terms were disclosed for the deal, which calls for Fiat Chrysler to provide Google with 100 Chrysler Pacifica hybrid minivans built specifically to accommodate self-driving features.." [Read more](#) *Hmmm...This is substantial because it implies that Google is able to easily retrofit its "self-driving" technology into vehicles rolling off of the assembly line. (I could be reading much more into this than I should, but this is basically what Google did with Priuses and Lexuses until it became obsessed with removing the steering wheel. Minivans have a nice roomy compartment with easy access and non-swinging doors. Seems logical in order to be able to serve shared-ride opportunities; else too much crawling over people :-)* [See also Fiat's view.](#) Alain



[NTC@Maryland Cohost Workshop on Automated Vehicle Policy and Regulation](#)

Press release, May 1, "The focus of this workshop is to identify key principles the states will need to wrestle with in order to craft effective policy to enable the safe operation of advanced automated vehicles (sometimes called autonomous, self-driving, or driverless vehicles) on their roadways. The current approach is unsystematic considering the huge impact this new technology will have on our roads. A few states permit testing of these vehicles either through legislation or order of the governor, while others are testing without official approval. In the interim states are relying on their existing vehicle laws to govern automated and autonomous vehicle operations until appropriate policy and regulations are identified..." [Read more](#) *Hmmm...Worth attending. Alain*



[Google, Ford, and Uber just created a giant lobbying group for self-driving cars](#)

Press release, Apr 22, "China's leading search engine, today announced it has formed a self-driving car team in Silicon Valley focused on research, development and testing. The team will be part of Baidu's newly-created Autonomous Driving Unit (ADU). Baidu plans to grow the team to over 100 researchers and engineers by the end of the year...Baidu's self-driving car vision is based on an incremental approach, which includes starting with small "autonomy-enabled" regions and designing autonomous cars to be clearly recognizable." [Read more](#) *Hmmm...Playing catch-up or do they see a leap-frog opportunity? Alain*



[Drive.ai Brings Deep Learning to Self-Driving Cars](#)

E. Ackerman, Apr 26, "[Drive.ai](#) is the 13th company to be granted a license to test autonomous vehicles on public roads in California. This is exciting news, especially because we had no idea that Drive.ai even existed until just last week. The company has been in stealth mode for the past year, working on applying deep learning techniques to self-driving cars. We spoke with two of Drive.ai's co-founders, Sameep Tandon and Carol Reiley, about why their approach to self-driving cars is going to bring us vehicle autonomy that's more efficient, more adaptable, more reliable, and safer than ever.

[Drive.ai](#) came straight out of Stanford's AI Lab about a year ago. Its core team is made up of experts with a wealth of experience developing deep learning systems in all kinds of different domains, including natural language processing, computer vision, and (most recently) autonomous driving. "This team helped pioneer how to scale deep learning, which is one of the reasons why deep learning has been successful as of late," says Tandon, the company's CEO., [Read more](#) *Hmmm...We agree... Image-centered Deep Learning is a very interesting approach to all of this! :-)* Alain



[Baidu Announces New Self-Driving Car Team in Silicon Valley; Plans to Grow to 100+ in 2016](#)

A. Hawkins, Apr 26, "...announced Tuesday the formation of the Self-Driving Coalition for Safer Streets, a lobbying group with the express purpose of advocating autonomous driving. It's a power move by some of the most high-profile names behind the still nascent technology, made at a time when regulators and policymakers in Washington, DC are still wrapping their heads around the concept of self-driving cars. The coalition will be headed up by David Strickland, a former administrator of the National Highway Traffic Safety Administration (NHTSA). He will serve as the group's counsel and spokesperson. In essence, Strickland will be lobbying his former agency,..." [Read more](#) *Hmmm...Congrats David!!! (But why does The Verge display an image of connected cars instead of automated cars. I can't imagine that this group is going to be lobbying for the federal deployment of "V2V". David knows very well the difference between "Connected" and "Self-driving".) Alain*

The Dispatcher

[Data Privacy and Connected Vehicles](#)

M. Sena, May 2016, "...It is often the case that laws regulating how companies have to behave toward

their employees and their customers end up having unintended side effects. It is my opinion that these effects will end up being good for consumers and for the mobility industry. ." [Read more](#) *Hmmm...Very interesting discussion of Data Privacy and mobility. See also section on G7 and EU on Autonomous Driving and the side-bar on INRIX. Alain*

Orlando Sentinel

[New law cracks open Florida self-driving car research](#)

J. Ruiter, Apr 20, "...The transportation bill signed by Gov. Rick Scott earlier this month explicitly allows riderless cars to hit public roads for research. The bill brings the idea of autonomous cars, still under a controlled setting, closer to reality in the state, if not the country.." [Read more](#) *Hmmm...See also [B. Simpson](#). Nice to see Florida moving forward. New Jersey... not so much!! . :-(Alain*



[SMRT and 2getthere partner to bring automated vehicles to Singapore](#)

L. Chia, Apr 20, "Automated vehicle systems providing seamless first-and-last-mile connectivity for commuters in Singapore could soon become a reality with the announcement of a joint venture (JV) between SMRT Services and Dutch company 2 Getthere Holding (2getthere) on Wednesday (Apr 20). The Singapore-based JV, called 2getthere Asia, will market, install, operate and maintain automated vehicle systems for customers in Singapore and the Asia-Pacific, according to both parties during a press briefing. The aim is to commercialize 2getthere's third-generation Group Rapid Transit vehicle system in Singapore by the end of the year, both parties added..." [Read more](#) *Hmmm...See embedded video. Alain*

The Washington Post

[This city embedded traffic lights in the sidewalks so that smartphone users don't have to look up](#)

R. Noack April 25, "...city of Augsburg became concerned when they noticed a new phenomenon: Pedestrians were so busy looking at their smartphones that they were ignoring traffic lights. The city has attempted to solve that problem by installing new traffic lights embedded in the pavement — so that pedestrians constantly looking down at their phones won't miss them..." [Read more](#) *Hmmm...You can't make up this stuff. On one hand, we have below in C'mon Man comments that cities can't handle the most basic infrastructure needs; yet here, install infrastructure to allow pedestrians to bury their faces in their mobile devices. (and this isn't even an approach that can also help the visually challenged. I give up! Alain*

Some other thoughts that deserve your attention

THE WALL STREET JOURNAL.

WSJ

[How the Daily Commute Is Going to Change](#)

A. Lazoi, Apr 24, "Ride-sharing firms Uber Technologies Inc. and Lyft Inc. are experimenting with carpooling services that are changing how people get to work..." [Read more](#) *Hmmm...As far as I'm concerned, Ride-sharing delivers enormous benefits. In fact it is the real value proposition of "Driverless". (Don't worry, we are far away from "all" cars responding to the same information. And we'll never be there because "all" cars won't have the same driving algorithm nor be managed by a single "Marxist" control center :-)* Alain

[On the More Technical Side](#)

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



[Automated and Connected Vehicles](#)

Summary of the 9th University Transportation Centers Spotlight Conference November 4–5, 2015 Washington, D.C. [Read more](#) *Hmmm...Heavily focused on Connected rather than Automated simply because that's been Fed DoT's focus which is the overwhelming source of funding for University Transportation Centers.* Alain

Recompiled Old News & Smiles:

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

Vox

[5 big challenges that self-driving cars still have to overcome](#)

B. Plumer, Apr 21 "...So what are the big hold-ups, anyway? After watching Urmson's presentation, I called two experts — Edwin Olson of the University of Michigan and Nidhi Kalra of the RAND Corporation — to dive more into the obstacles that stand between us and our glorious self-driving future. None of these things are deal-breakers per se, and there are tons of smart people working on these problems. Instead, think of this as a big to-do list:..." [Read more](#) *Hmmm...Some (maybe only #2) of these may be challenges that "Driverless cars" need to overcome. None are challenges that "Self-driving Cars" because there is always a driver capable of filling in. (which in the end is a real limitation of "Self-driving".* Alain

[C'mon Man! \(These folks didn't get/read the memo\)](#)

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WSJ

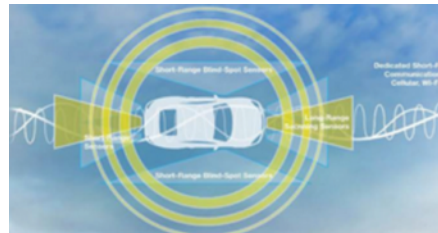
[Why Cities Aren't Ready for the Driverless Car](#)

H. Petroski, Apr 22, "...What will cities have to do to get ready for the transition to the autonomous car? For starters, they will have to maintain everything from complex intersections to lane markings to the specifications expected by vehicle software designers. Without a city's

commitment to certain standards, self-driving autos might freeze in place on streets lacking clear lane markings. Similarly, unmanned vehicles might proceed at speed through an intersection where a stop sign has been removed by college students or knocked down the night before by an impaired human..." [Read more](#) *Hmmm... Soooo wrong for so many reasons; only have room for 2: Today's "software engineers" (educated at good institutions) are focused on making the cars work in the existing environment and fully realize that is impossible to get a "city" to do anything. It is so much cheaper and easier to write the software that works with what is there, than to have cities maintain "clear lane markings". (Think of it... "clear lane markings" benefit human drivers, yet "cities" and "DoTs" can't even apply paint to help all of us drive better. Not a chance that they are going to do it for the first few driverless vehicles. This has been obvious to even the most casual "software engineer". They also know that they'll only get paid for their software is if it works without asking "cities" and "DoTs" for anything other than "please, stay out of the way,thank you".) 2. If a Stop sign is remove, human drivers kill people (and arguably do so at a higher rate because the driverless car has a digital map database that likely remembers that a stop sign existed at this location and therefor approaches it cautiously if it doesn't "see" one!) [C'mon WSJ!](#) How about just sticking with your in house journalists. Alain*



<http://www.autonomoustrucksevent.com/agenda-mc>



Workshop on Automated Vehicle Policy and Regulation:
[A State Perspective](#)

The National Transportation Center, University of Maryland
May 18, 2016
[Preliminary Program](#)