

**Frank Beckman:** Well, it is a pleasure to welcome onto our show, a man who really needs no introducing. Usually at that point if I'm the MC of an event I'd say so let's not give him one. But let's say he's been a consumer advocate his whole life; lawyer; author of a children's book, a fable now; Ralph Nader here at CES looking over at all this technology that we have been told is going to make our vehicles drive themselves and let me say to everybody a head of time, he ain't buying it, are you?

**Ralph Nader:** No.

**Frank Beckman:** Why not?

**Ralph Nader:** Fully driver-less vehicles is just a fantasy. For the next thirty/forty years, there are too many variables that take advantage of. Semiautonomous vehicles - sure it's there already, automatic emergency braking for example; lane changing; parking all these things are coming and there are good. But to take the control of the vehicle completely out of the hands of the driver, no steering wheel or nothing, and then to be exposed to complex software, and its complex to hacking, from all directions everywhere in the world..... that's not going to be overcome in a few decades.

**Frank Beckman:** So you think there are just too many drawbacks? There are too many fears for people to trust it completely?

**Ralph Nader:** Right. There are just too many variables. Bicyclist; pedestrians; chickens; potholes; rain; shimmying slides of trucks that are missing tarps and these tests are proprietary, and all these companies have been engaged in, and I'll say disclosed their tests; their data why not give them any credibility.

**Frank Beckman:** Now you know a lot of people are going to think of you as the Grinch here, you stealing Christmas.

**Ralph Nader:** Yeah well usually I push the auto companies for innovation. Look how they took to putting in seat belts; airbags; collapsible steering cars. Now Detroit is being pushed by Silicon Valley. Silicon Valley is taking a huge risk because it has been subsidized all their existence but government research and development and so. It is amazing to have to say that Detroit is going to put up the caution sign to the Silicon Valley fantasies.

**Frank Beckman:** So give me your take, Ralph Nader, on what we are going to see develop. What will happen and when will it slow down?

**Ralph Nader:** Well by 2022. September is usually when most manufacturers will have automatic emergency breaks in systems, its standard equipment and we'll see piece by piece like that. But as the software gets more complex, the hacking gets more serious and it's not just hacking from crazy's or hacking from intentional criminals, look What VW did with hacking you know in effect their own software and their deep trouble on that one. So I think there is a privacy issue; there is a fear of loss of control by motorist issue and these are not going to be remedied. I call them nontechnology barriers to fully autonomous vehicles.

**Frank Beckman:** I thought that Ralph Nader was going to sit down and tell me he loves this idea but I got to tell you I'm surprised to hear that you're skeptical about it but you know you've been ahead of the curve on a lot things for a while so I shouldn't doubt you.

**Ralph Nader:** I'm also worried about the arrogance of the algorithms and the distractions from focusing on the modern public transit for example. The distractions from updating all kinds of old fashion safety systems to save lives now, both driver highway and vehicle it's all the hype and most of the media is going to driverless cars.

**Frank Beckman:** But the token, you know, some people will also argue and say look there are always going to be accidents whether they are driverless cars or driven cars; and the only question is liability.

**Ralph Nader:** Well that's a big question and also regulations and also what does the state regulate; what does the federal regulate; what are the powers on whistle blowers, for example. What's the role of the press to deflate the hype? What's going to go with companies that really not into the auto industry the way that the major auto manufacturers are, they just want to sell the software. I mean, there are all kinds of collisions here and you know who is going to figure it out. I mean, I wish them luck but in the meantime let's not get distracted.

**Frank Beckman:** What a pleasure to have to here in Las Vegas. Just remember if the dealer is showing ten you've got eleven at the blackjack table. That's the only time you don't double on eleven is the dealers got ten okay

**Ralph Nader:** Frank, I don't touch that stuff.

**Frank Beckman:** Great to see you, Ralph.

**Ralph Nader:** You are welcome.

**Frank Beckman:** Well that will do it for us tonight. Hope you enjoyed our presentation, our look at mobility and the way it's advancing so quickly all around us. I want to thank all the special guests we had a chance to sit down with this week at CES and thank you for joining us as we explore the future of mobility. A special presentation made possible by Deloitte. Deloitte - reimaging boundaries and powering possibilities. I am Frank Beckman. The preceding program has been presented by Deloitte.