▼ Google's Autonomous Cars: Get In

It's no longer a question of *whether* driverless cars will appear on the market; it's when and how many. The answers so far seem to be: 1) soon; and 2) lots. German automakers are so confident of this that they are already negotiating with Nokia to compete to Google's selfdriving cars. For Legal Planet, that means we should start thinking about how this would affect, well, the planet — specifically emissions from vehicle miles traveled. And that presents quite a formidable challenge to think through. (**UPDATE:** Great minds think alike. Ethan Elkind considered this issue three years ago in Legal Planet, with observations that are complementary to this post. Check out Ethan's take <u>here</u>.).

Consider: I drive about 6 miles to work at UCLA every day. If driverless cars become the norm, will that reduce or increase emissions?

1) **Increase.** Why? Well, my car will drive me to work, then go home, then come back, then drive me back. I won't want to pay for parking. That means doubling the emissions.

2) **Decrease.** But if that's true, then it means that we will need less parking. And if that is true, we can use the massive amounts of land currently devoted to parking for development, meaning that there will be more dense urban form, and less vehicle miles traveled because you won't need to go so far and it will be easier to use transit.

3) **Increase.** But maybe if driverless cars become the norm, then people will drive more because it will be more pleasant. People hate driving in no small part because they hate fighting through traffic and it is wasted, unproductive time. Now, people will be more inclined to "drive" because it will be so much easier.

4) **Decrease.** But if driverless cars become so convenient, then maybe people won't need their *own* cars at all. It will be one massive Uber and Lyft-fest. If that is true, then there will be fewer cars, and the fleets will be more easily updated due to higher demand. Or to put it another way, I will go to and from work, but there won't be any more trips because I will be using an available (and thus different) car each way.

As you can see, there are about a million different moves that can be made here, each of which not only involves several assumptions about how human behavior may or may not change, but also rests upon policy choices (most of which we can really conceive of yet) and in any event will require turning around the Massive Aircraft Carrier That Is Policymaking In The United States.

In all, it seems to me somewhat of a combination between Sisyphus and Yogi Berra. As to the former, policymakers and modelers will have to get to work, even though they understand that events will pass them by and result in things that they couldn't have imagined. As to the latter, we should remember Yogi's epigram: "the art of prediction is very unpredictable, particularly when it pertains to the future."

