

Comment from Ted Loewenberg

V2X Communications as proposed will be incredibly expensive to implement and deploy. It is a pipe dream that will become a financial nightmare for America. Every meter of road, highway and public space will have to install beacons to simply describe where the navigable surfaces are, in addition to sensors to reflect current reality of use (number of peds, rates of all traffic, weather and so on). Pedestrians and cyclists, as well as rented scooter users, Segways, and such will have to participate through their personal phones (what happens when the batteries run out?). Every sign and traffic control device will have to communicate with all the vehicles about their status (red v. green), stop, left turn only or turn prohibited, etc. That means electrical power to every sign, with a powerful digital processor and complex software to handle all the communications as well as on-going maintenance and updates. Those changes need to be propagated throughout the entire system, and maintained for decades for compatibility.

The expense of doing all this, not to mention the vast complexity of it all, make this virtually impossible. There is no way to do comprehensive testing of the millions of devices involved. Errors will introduce a new danger to the public: death by software bug. This has already been seen in the early phases of autonomous vehicles, and will likely only get worse with time. Alternatively, the human brain comes pre-programmed for complexity. It already handles all of these situations, sometimes better than others. The communications of traffic control devices (lights and signs) are managed effectively now, at very low cost (compared to V2X). It is a gross mistake to supplant human cognition with a limited capability hardware and software jungle that will bankrupt both federal, state and local resources, in addition to driving still higher the cost and prices of vehicle transportation. Drivers come fully equipped with the most powerful computing tool in the known universe. Let's put that to good use. Let's encourage improvement of that "system" where there is weakness. We know that human behavior is not perfect. However, we can do better through education and creative problem solving to make our society mobile and safe. The environment will also benefit by reducing the draw on electricity that will be required to operate a V2X network nationwide.