



BY RICK NELSON, EDITOR-IN-CHIEF

## Technical and political suggestions for Detroit

**D**o the Detroit automakers deserve a bailout, or should they be left to go the way of the dinosaurs (**Reference 1**)? Perhaps there are other options. In a recent article, Sebastian Thrun, a professor of computer science at Stanford University, and Anthony Levandowski, now a product manager at Google, discuss “four technologies that could be put on the road in the next several years.” They describe these technologies, some of which they say they invest in, as win-win

situations, which alone or in combination can increase energy efficiency, improve safety, cut pollution, and make commuting more convenient (**Reference 2**).

Those technologies, they write, include Wi-Fi-like dedicated short-range communication, which enables cars to form ad hoc networks with one another and with roadway infrastructure; automatically controlled X-by-wire capabilities that would allow robotic cars to drive in tight formation under computer control (**Reference 3**); solar/electric-hybrid technology, in which solar panels on one garage provide power for 10,000 miles of driving per year; and smartphone-like online-communications capabilities that will help drivers find parking spaces, make restaurant reservations, and purchase songs they hear on the car radio.

On the eve of Obama’s inauguration, auto-industry journalist Steve Parker detailed his own ideas for saving Detroit (**Reference 4**). Parker’s recommendations are a political wish list of what he would like the incoming administration to do. He suggests that we begin an Apollo-like program to deploy “the first national infrastruc-

ture for hydrogen- and natural-gas fuels” and build fuel-cell-based vehicles that can run on these fuels. He also suggests raising federal gasoline taxes and instituting tax rebates and other incentives for purchasers of high-mileage, clean vehicles. He’d like Detroit to become involved in the development of modern high-speed-rail and light-rail systems. And he’d like government to mandate that automakers achieve CAFE (corporate-average-fuel-economy) levels of 35 mpg—currently slated for 2020—by 2015.

Both groups of suggestions have some good ideas but no silver bullets. As for the technical solutions, technologies for robotic cars to drive in tight formation or for the deployment and use of a hydrogen infrastructure seem impractical in the short term; I wouldn’t advocate extensive public financing for R&D in either area. CAFE standards have had the perverse effect of encouraging the Big Three to heavily market profitable SUVs and trucks to offset losses incurred in selling fuel-efficient autos. Tax rebates on fuel-efficient cars coupled with higher gas taxes or sales surtaxes on low-mileage cars might be a better approach,

although a surtax on low-mileage vehicles would unfairly penalize individuals and families that need trucks or large cars for occasional use. (Commercial vehicles could be exempt from this surtax.) As for involving Detroit in rail projects, well, OK, but why would the Big Three be more successful in making trains than in making cars?

Solar/electric-hybrid technology shows promise. If the technology is not ready for home installation, perhaps employers and commercial establishments could offer solar-enabled parking as a perk for employees and customers. Ad hoc networking schemes and enhanced online-communications capabilities also hold promise—especially if public investment in roads and bridges could help put the electronic infrastructure in place to provide real-time information on traffic and roadway conditions and on nearby services and points of interest.**EDN**

### REFERENCES

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- 4 Parker, Steve, “Five Things Mr. Obama Must Say About Detroit—and Fast,” *The Huffington Post*, Jan 19, 2009, [www.edn.com/090219edb](http://www.edn.com/090219edb).

Contact me at [nelson@reedbusiness.com](mailto:nelson@reedbusiness.com).

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