

Are We There Yet?

The complex road to automated vehicles



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www.hsrc.unc.edu

October 7, 2020

Elon Musk Says Tesla Vehicles Will Drive Themselves in Two Years

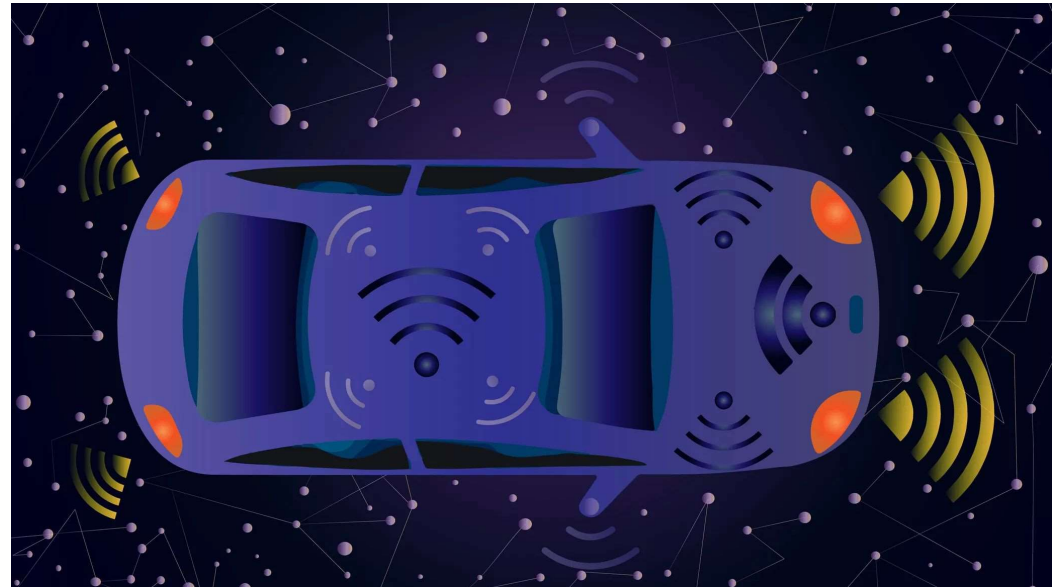
By **KIRSTEN KOROSK**

December 21, 2015 2:00 PM EST



2015

2020

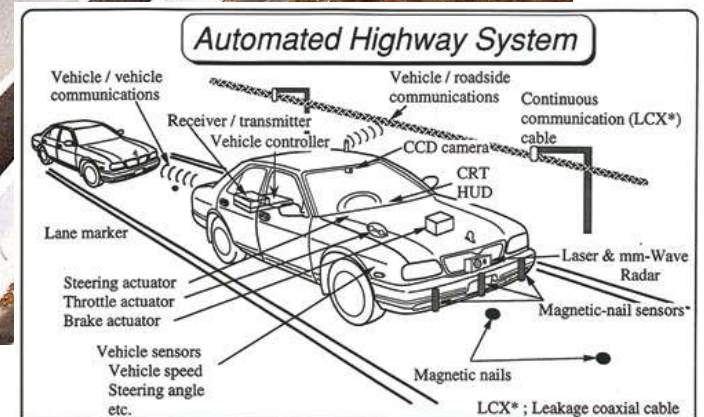
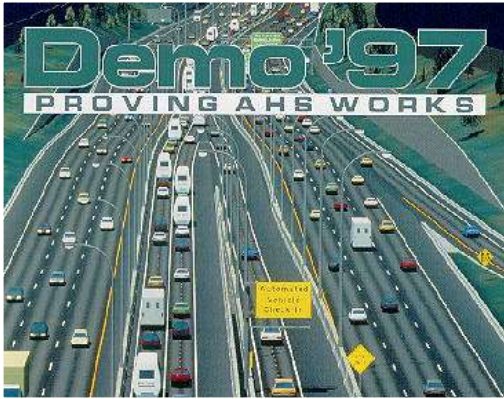


Why we're still years away from having self-driving cars

Self-driving cars were expected to roll out by 2021. Here's what we need to solve and build first.

By **Eric Adams** | Sep 25, 2020, 3:40pm EDT

Automated Highway System (AHS)



Then... What?

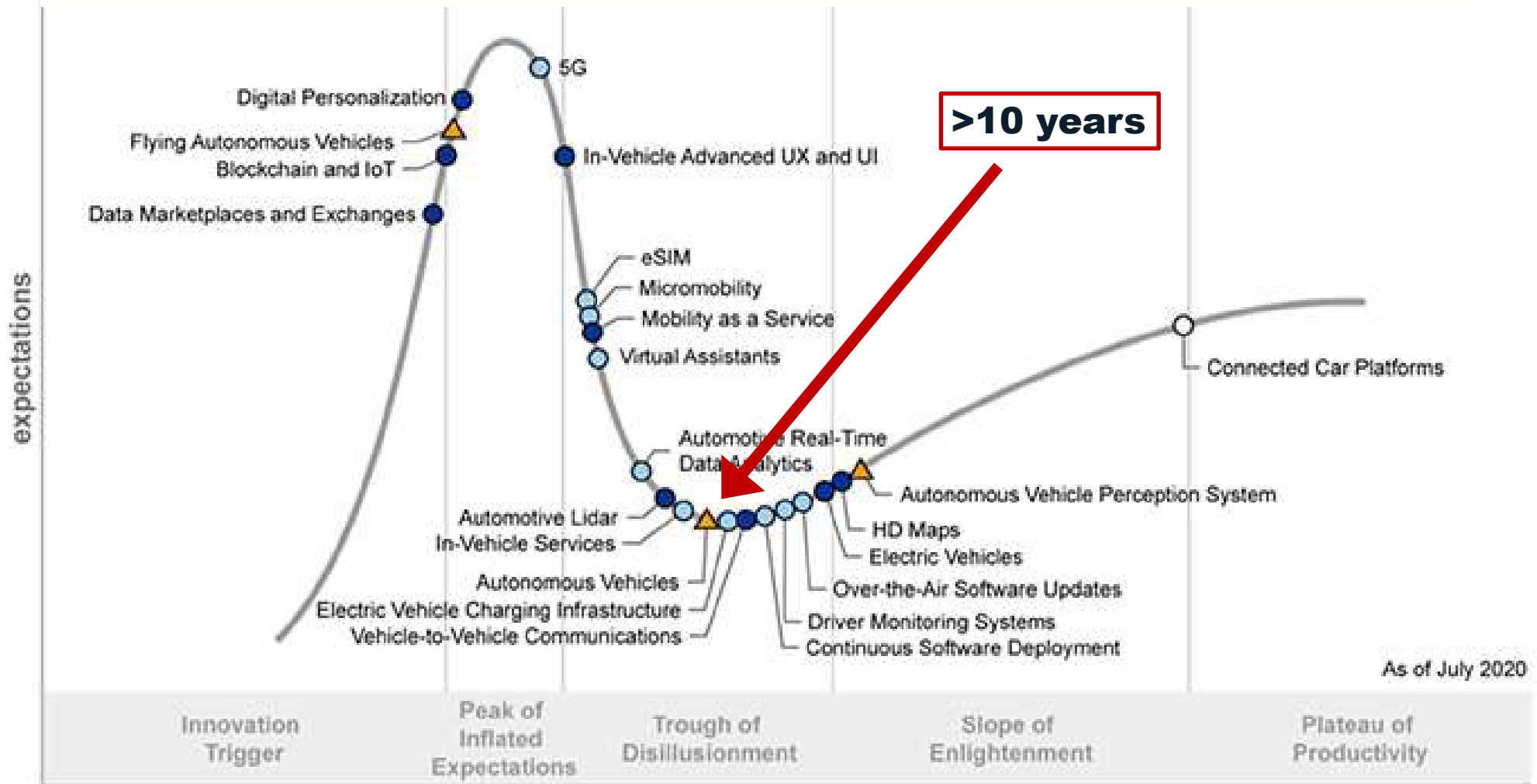


AHS Technical and Institutional Challenges

- **ODD limitations** limit deployment.
- Significant human factors issues raised.
- System reliability will need to be very high.
- Liability shifts to the manufacturers.
- Mixed traffic creates new operational challenges.
- Deployment will be *very* expensive.
- Capabilities may increase demand and urban sprawl.

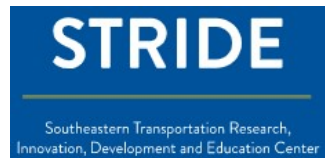
R. Ferlis (2007). "The dream of an automated highway"

2020 Gartner Hype Cycle for Connected Vehicles and Smart Mobility

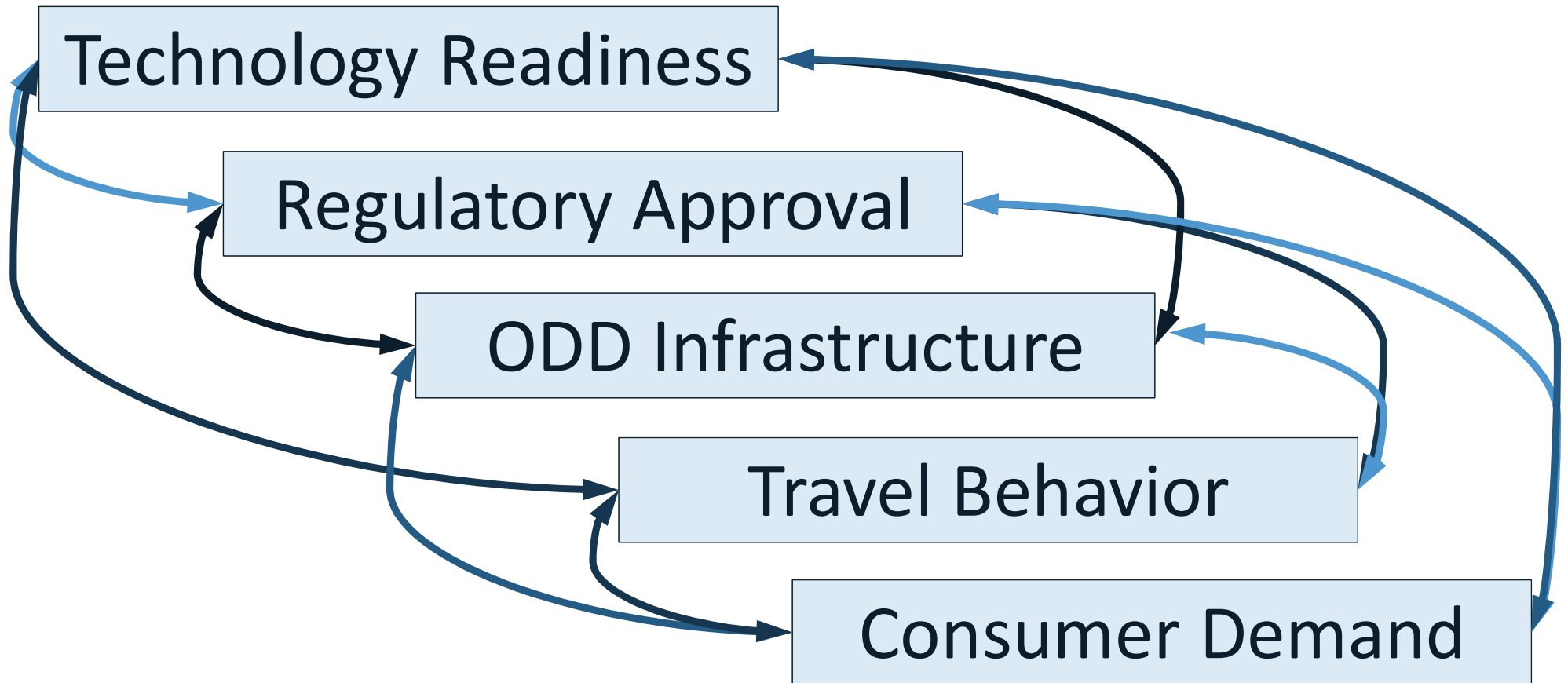




University Transportation Centers (UTC)



Factors Affecting Automated Vehicle Deployment



Thank you!

