

Abstract for ISSIP - NSF Workshop Panel Presentation

Burford Furman

San José State University

2017-03-24

The Transportation Research Board recently identified a set of hot topics that they consider to be transformational technologies for transportation¹:

- Connected–automated vehicles
- Shared-use services
- Unmanned aerial systems (UASs)
- IoT
- Cybersecurity
- Smart cities
- NextGen (aviation operations)
- 3-D printing
- Big data

While these are having and will continue to have *some* transformational impacts in transportation, they are fundamentally *not sufficient* to address the herd of 'elephants in the room' when it comes to a bright future for mobility in urban areas: finite fossil fuel resources, pollution, congestion, safety, and quality of life. ***A new paradigm for truly sustainable urban transportation is needed.*** Researchers at San José State University and others propose Solar Powered Automated Rapid Transit Ascendant Networks (SPARTAN) as the way forward. An overview of work done at SJSU and opportunities for industry-academe research partnerships focused on SPARTAN will be presented.

¹ Mohaddes, A., & Sweatman, P. (2016). Transformational Technologies in Transportation: State of the Activities. Transportation Research E-Circular, (E-C208).