# Transportation Technology Policy Forum

*California Transportation Commission*

**August 3, 2017**

**Kathryn Mullins,** *Director of Strategic Partnerships,* **RSM Technologies - kmullins@rsm.ie**

# RSM Background

- Simon - computational intelligence platform based on fuzzy logic

- Designed to manage urban traffic intersections in real-time, live data gathered at the intersection

- Hardware and data agnostic – leverage many sensors (radar, infrared, etc) and data sources

- Live, comprehensive simulations of intersection environments and transportation zones

- Demonstration projects with public sector – provide open access to data and analytics

- Key Uses:
  - Evaluate intersection efficiency – wasted green signals, etc.
  - Transportation planning
  - Vision Zero – safer environments for pedestrians
  - Data and analytics for connected/autonomous vehicles (C/AVs)
  - Route planning and wayfinding
  - Smart logistics
  - Public transit prioritization
  - Determining signal system performance
  - Platform for intelligent cities

# Dashboard View

# Current AV Landscape

- Automotive industry in transition

- Extensive investment in auto tech – traditional OEMs and startups

- Assumption these vehicles will not rely on infrastructure long-term, negotiate priority on their own

- What happens now?
  - Integrate with existing traffic environments before C/AV technologies are ubiquitous

- Safe, efficient deployment – not "one company, one technology" solution

- Pathways for collaboration –
  - Comprehensive solutions from multiple private sector partners
  - Public/private partnerships – new avenues for engagement
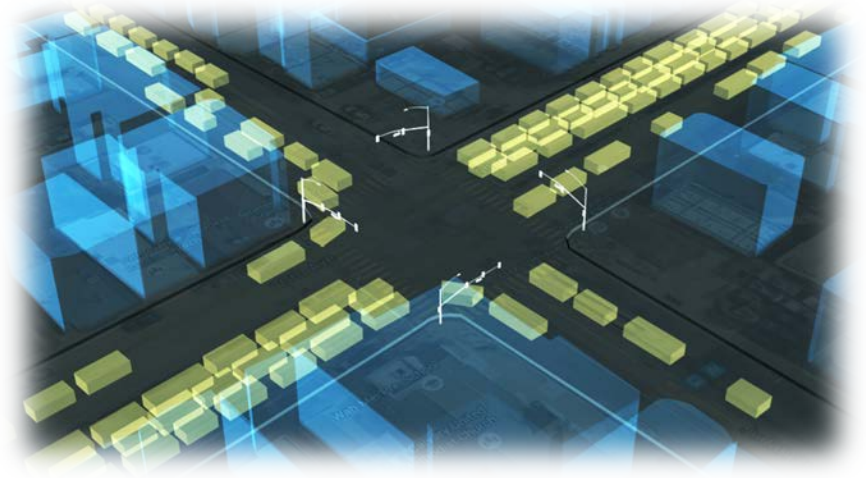
# Importance of Intelligent Infrastructure

- Addresses the gap – now to critical mass of AV's

- Generate efficiencies and higher levels of safety for all roadway users – add value for everyone

- Negotiate priority for vehicles regardless of connectivity

- Include cities in this transition – very smart vehicles, outdated infrastructure

- Reduce congestion, pollution, address systemic traffic and transportation issues
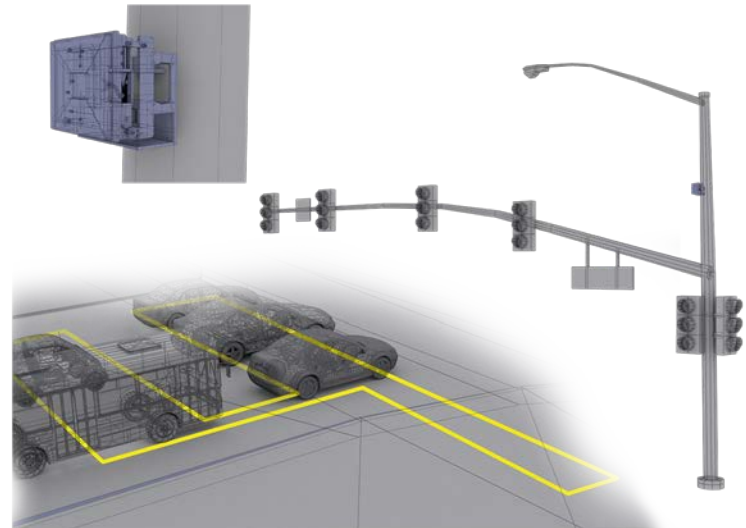
# Role of Cities, Agencies, Legislature

- Ensure that C/AV deployment increases public benefit – proactive stance

- Injection of core values – DOT Smart City Challenge example
    - Increasing equity & connectivity, reducing pollution, enhancing quality of life for all residents

- Policy developers, technology influencers

- Identify how technology can help meet public sector mandates

- Living labs – test zones in existing road networks

# Policy Thoughts

- Focus on the important issues – safety
- Broad policy objectives – cannot address all issues now, smart phone analogy
- Pave the way for demonstration – product iteration occurs in a live environment, cities and agencies have a seat at the table
- Re-thinking PPP's – how can private sector assist with Cap Ex?
- Procurement – new policies to encourage owner/operators to experiment with technology, address risk
- California leadership – stance to encourage innovation
  - Guiding legislation for AV pilots
  - Encouraging individual cities and municipalities – providing policy guidance, avoiding policy 'patchworks'

**Thanks!**

Questions?

Email: kmullins@rsm.ie
Mobile: +1.415.335.0374
www.rsm.ie