**Smart City, Smarter Design**  
Palo Alto’s Connected Vehicle Traffic Signal Network

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**The Problem**

- Palo Alto received requests for use of real-time traffic signal data for connected vehicle applications.
- Solicitations requested permission to install 3rd party applications on City servers inside the firewall.
- **THE PROBLEM:** The City did not intend to allow any 3rd party applications on its servers, particularly ones that transmit city data in proprietary formats.
- **PERFECT TIMING:** In 2015, Palo Alto began a Citywide Traffic Signal System Upgrade that would replace traffic signal controllers and auxiliary field equipment at each of the City’s 100 signalized intersections, and would present the perfect opportunity to deploy SmartCity traffic management systems or “Talking Intersections”, a concept only a handful of cities are experimenting with today.

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**The Solution**

- **INTRODUCING A NEW MODEL:** Through the newly designed Connected Vehicle Module in ATMS.now, the data will be transmitted in a common format to all users under a new Transportation Data Utility Model.
- Through contract subscriptions, the Connected Vehicle module will broadcast traffic signal information that is collected by the ATMS.now central system, over 200+ data sets in total.
- Subscriptions will be managed directly by the City through ATMS.now and requires users to provide server and network information.
- Palo Alto has the ability to manage up to 100 separate subscribers through the ATMS.now interface, and can elect to expand the system.
- Subscriptions to Palo Alto’s traffic signal data are initially Free in order to enable technology development using the data sets.
- Went live May 2016.

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**Market Response**

October 21, 2015, Palo Alto hosted a Connected Vehicle seminar drawing the attention and support of leaders in their space.

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**National Importance**

OPEN SOURCE TRAFFIC SIGNAL DATA: Palo Alto will provide access to traffic signal data for connected vehicle applications via an “open source” model.

SHOVEL READY: Using an infrastructure that already exists, with a communications network and processing power that’s readily accessible, could make this transformative.

“...right now is one of the moments when we are influencing the future.”  
- Former Palo Alto resident Steve Jobs