The Modern Landscape of Traffic Signal Systems: How innovative technologies are inspiring change to age-old practices

Monday, December 7
1:00pm - 2:20pm PST

Description

Traditionally, traffic signal devices and management systems were developed in antiquated technologies and ranged 10-15 years behind global technology practices. Signal systems served a limited purpose: to remotely monitor and configure the traffic signal controller. Industry needs and customer experiences with consumer technologies such as smart phones have demanded change and innovation. In addition, affordable data storage, advances in field hardened computing equipment, and high-speed Ethernet communications have propelled us into the 21st century with complex deployment topologies, enhanced functionality, and the need for interoperability with other intelligent transportation system devices.

This presentation will include a brief timeline of "innovations" in the traffic signal and systems industry and the associated challenges with legacy technologies. The presenter will also discuss how new technologies such as big data and analytics, high-speed and cellular communications, and connected vehicle applications not only change the way we manage our transportation infrastructure, but also the qualifications and training necessary for the future traffic engineer.

Presenter

Mr. Stiles has over 15 years of experience in traffic engineering and operations. Using standard and innovative practices and his advanced knowledge of controller firmware functionality he has optimized throughput and improved safety in hundreds of signal systems throughout the country. He has spent the past 10 years in various lead roles at Intelight, a traffic signal hardware and software manufacturer; designing traffic engineering aspects and functionality of core products and now works with an expert and innovative team guiding the group's overall vision. Currently Tom is an Executive Vice President in Q-Free's ATMS division (Previously Intelight, Inc.). Tom graduated with a B.S. in Civil Engineering from the University of Washington and now lives in Seattle, Washington with his wife and two young boys. While spending summers cruising in the Puget Sound, he reminds his sons they can choose any school they want. The UW school of Civil Engineering, UW school of Electrical Engineering, UW school of Mechanical Engineering, etc.

Tom Stiles, P.E. PTOE
Executive Vice President
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