

## **Blue Toad for MAC Address reading for Travel Times**

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TrafficCast has leveraged the mobile phone industry's use of open hardware and software platforms to create BlueTOAD™ (Bluetooth Travel-time Origination And Destination), advanced monitoring of Bluetooth signals to determine prevailing road speeds and vehicle behaviors.

Using compact roadside receivers, BlueTOAD tags anonymous mobile device identifications used to connect Bluetooth technologies (such as "hands-free" headsets and in-dash sync services, currently active in 10-20% of all vehicles), and calculates travel time by analysis of timestamps on subsequent tags. The technology can also monitor vehicle movements through intersections, interchanges and alternate routes, providing a depth of data unmatched by traditional planning procedures

BlueTOAD incorporates high-speed data connectivity as well as local data archiving for "real-time" and "post-processed" data collection. The devices can connect to local power and communications, or operate independently with solar power on a cellular data network.

At the conference, TrafficCast will share results from field deployments and agency evaluations in various environments and use cases. In particular, TrafficCast will describe the deployment of BlueTOAD for the Eisenhower Expressway (I-290) reconstruction during the summer/fall of 2010, and how the technology supported the Illinois Department of Transportation (I-DOT) in the communication of accurate travel times and the promotion of work zone safety. TrafficCast will also offer examples of how BlueTOAD address both planning and operations needs.