

TRANSPORTATION ENGINEERING SEMINAR

Development of Integrated Corridor Management Strategies Using Advanced Simulation Modeling

Friday, October 30, 2015
3:00pm to 4:30pm

Please join us in College Avenue Commons, Room 425

Eric Nava

ITS & Safety Engineer, Maricopa Association of Governments



The I-10 corridor is a vital freeway corridor in the Phoenix metro region. Traffic operations on I-10 are frequently disrupted by traffic incidents of varying severity. The greatest disruptions are caused by incidents requiring full freeway closure, and cause large traffic delays on and off the freeway for many hours. As part of a broader effort to advance Integrated Corridor Management Systems (ICMS), the Maricopa Association of Governments (MAG) in coordination with the City of Phoenix (COP), Arizona Department of Transportation (ADOT), Arizona Department of Public Safety (DPS), and Maricopa County Department of Transportation (MCDOT), and with technical assistance from on-call consultants, is developing systematic traffic response plans to help minimize the overall traffic delay in the event of a full closure of the I-10 corridor on a 24/7 basis.

A MAG project supporting this effort intends to develop diversion response plans in order to minimize the overall traffic delay in the event of a full closure of the I-10 freeway at any point, in either direction, between 35th Avenue and 83rd Avenue. Determining diversion response plans are accomplished by utilizing the MAG DynusT simulation model to study full freeway closure scenarios. Diversionary volumes and traffic delays are used to assess numerous, alternative diversionary routes with alternative cycle lengths and splits that best minimize queuing on the freeway during full closure events. Final results of the most recent modeling efforts and next steps will be presented.

Mr. Eric Nava is an ITS & Safety Engineer at the Maricopa Association of Governments (MAG). Previously, Mr. Nava was the program manager and lead research engineer in the DynusT Lab at the University of Arizona. His experience in dynamic traffic assignment (DTA) and regional operations planning has brought him to MAG working in the ITS Program, as well as the Transportation Safety Program. He currently is managing projects in the Traffic Signal Optimization Program, as well as maintaining the MAG regional DynusT model and assists in DTA modeling needs at MAG.



<http://goo.gl/A9e8aq>



Sponsored by GPSA.
Event is open to the public.