A SPECIAL INVITATION TO EDC-EXCHANGE TOWN HALL MEETING

Adaptive Signal Control Technology: Managing Risks, Achieving Objectives

The Federal Highway Administration (FHWA) is sponsoring a series of web-based Town Hall Meetings for transportation officials and their consultants relating to its initiative called Every Day Counts (see: http://www.fhwa.dot.gov/everydaycounts/). Every Day Counts (EDC) promotes methods intended to shorten project delivery and to accelerate the use of proven technology.

The next Town Hall Meeting in the series will address expediting the right-of-way project delivery phase and is scheduled for Thursday, August 16, 2012 from 8:00 am – 10:00 am Hawaii Standard Time at the following locations:

- **Oahu (I)**
  FHWA Hawaii Division Office
  300 Ala Moana Blvd., Honolulu

- **Maui**
  HDOT Maui District Office
  650 Palapala Drive, Kahului

- **Kauai**
  HDOT Kauai District Office
  1720 Haleukana Street, Lihue

- **Oahu (II)**
  HDOT Kapolei
  601 Kamokila Blvd., Kapolei

Are motorists complaining about waiting too long or stopping too often at traffic signals? Do you need a more proactive strategy for keeping signal timing aligned with traffic demand? Are data collection, modeling and fine tuning absorbing your time and budget? Then Adaptive Signal Control Technology might be for you.

The traditional signal timing process involves collecting a small sample of traffic volumes to develop “Time-Of-Day” signal timing plans that accommodate AM, Mid-Day, PM and Off-peak periods. These “Time-Of-Day” plans typically remain in place for 3-5 years or more and are most effective when traffic conditions resemble the design condition. When traffic conditions deviate from design conditions it is characterized as variability in demand. As variability increases signal timing becomes less effective and may result in congestion, increased emissions and crashes. The level of variability is related to land use retail land use such as big box stores and restaurants tend to induce high levels of variability during the mid-day, pm and weekend periods. Special events and incidents also have the potential to drastically shift demand, reduce the performance of traffic signal timing. Adaptive Signal Control Technology (ASCT) enhances the effectiveness of signal timing by continuously sampling traffic conditions and updating signal timing to accommodate current conditions.

The greatest challenge to successfully implementing ASCT is selecting a system that meets the agencies’ operational objectives and needs within the constraints of agency capability, budget and infrastructure. There are currently 16 adaptive control systems available from vendors in the U.S., each with specific functional objectives and unique data collection, communications, maintenance and operational requirements that must align with agency policies and resources. To mitigate the risks associated with ASCT implementation the FHWA has developed a document entitled “Model Systems Engineering Documents for Adaptive Signal Control Technology Implementation” that greatly reduces the level of effort involved in selecting an ASCT system. Local and State agencies have used the guidance to help successfully navigate the implementation process. This EDC Exchange will address the ASCT implementation process from consideration of the technology to selection and operation and maintenance.

To register for the Town Hall discussion in your area via a live webinar, please contact C. S. Papacostas at csp@hawaii.edu (phone: 808.956.6538) by August 13, 2012.