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## Providing Engineering Solutions In:

Traffic Engineering
Transportation Planning
Civil Engineering
Traffic Operations
Electrical Engineering
Intelligent Transportation Systems

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We are pleased to announce our 10th Anniversary. It has been a fulfilling 10 years of growth, completing over 300 interesting projects that cover a wide range of engineering design, traffic signal synchronization, traffic operations, ITS and Transportation planning.

We look forward to many more years of providing responsible engineering that results in perceptible improvement toward the quality of life, safety and efficiency of transportation, as guided by our motto: "Because We Care!"

As part of the 10th Anniversary celebration, we held a Hospitality Suite at the ITE International Conference in Anaheim. Over 50 clients and friends came by, and we had lots of fun. If you wish to view all the pictures, please go to our website and click the 'Events' page. We have also re-designed our website with more projects and other information. Please visit us at: <a href="https://www.advantec-usa.com">www.advantec-usa.com</a>.



# **Project Highlight:**

## Lancaster Citywide Traffic Signal Synchronization Project:

ADVANTEC has implemented citywide traffic signal synchronization for the City of Lancaster. The goals of this project were to improve signal synchronization, and to develop a Master Plan to guide future communications infrastructure development.

ADVANTEC developed and implemented traffic signal timing for AM, PM, and Midday peak periods for 130 signalized intersections. We performed a field inventory of all intersections, troubleshot and repaired existing communications system, developed a citywide Synchro model, implemented optimized signal timing using the QuicNet 4 signal system, and coordinated with Caltrans to implement timing at ramp intersections. We further finetuned the signal timing through field measurements and observations over a period of several weeks, and conducted GPS based Before/After studies. Besides, we have also developed a master plan for guiding the city in future development of the communications system.

The results of this project led to immediate and perceptible reduction in stops, delay, travel time, and emissions, with an estimated annual benefits of \$12 million and a first-year benefit/cost ratio of 44:1.

The improvements were perceived and well received by the local residents, and one of them wrote to the local newspaper to applaud the city's effort in reducing delay and stops, as reprinted below:-

#### Local Resident's Letter to Newspaper:-Lights Just Right

If you have ever sat at a red light staring at the empty intersection before you—no cars in sight, but you can't get a green light—you will surely enjoy cruising back and forth on Avenue K-8 from 10th Street West to 35th Street West. Through 15th, 20th and 30th