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San Diego Section NEWSLETTER

April Meeting / Luncheon Program

Date: **Thursday, April 2, 2009**

Location: **94th Aero Squadron Restaurant
8885 Balboa Avenue**

Schedule: 11:30 a.m. Registration and Networking
12:00 p.m. Buffet Lunch and Section Update

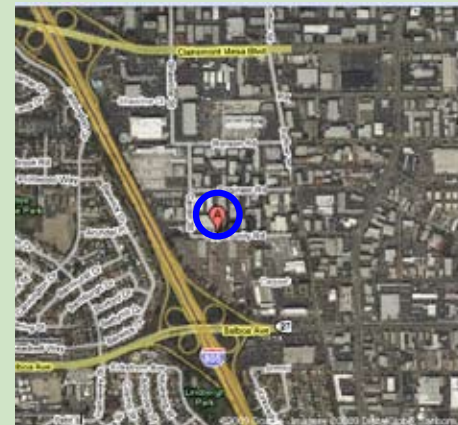
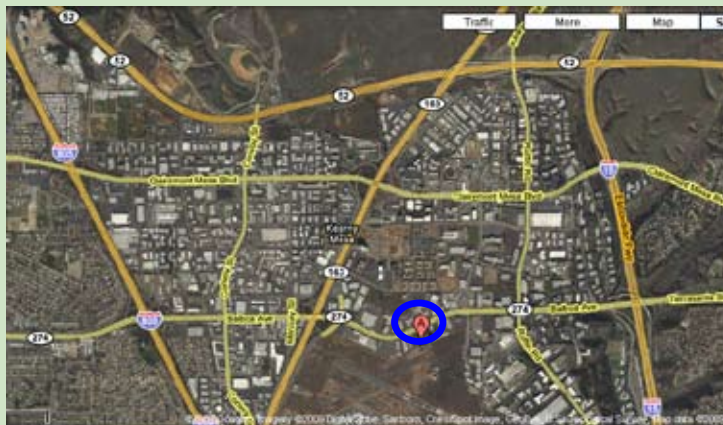
Program: 1:15 p.m. Tour of Caltrans Transportation Management Center led by
TMC Branch Chief Mr. Everett Townsend
7183 Opportunity Road

Cost: \$20 - public
\$30 - with reservation
\$35 - at the door

RSVP to Dawn Wilson (dwilson@rbf.com) on or before March 31st to reserve your spot. Reservations received after noon on March 31st will be charged the "at the door rate" of \$35. So be sure to let us know you are coming. When you call or email for your reservation, please let us know if you plan on attending BOTH the luncheon and the tour or just the luncheon.

94th Aero Squadron
8885 Balboa Ave

CALTRANS TMC
7183 Opportunity Road



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President's Message by Maureen Gardiner

Our annual joint meeting with the Southern California Section in March at El Adobe Restaurant in San Juan Capistrano was a great success. Thanks go to our Technical Chair, Samir Hajjiri who developed the program, our workshop panelists and luncheon speakers for great presentations, and the Southern California Section for arranging the location.

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President's Message

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Mr. Ryan Snyder of Ryan Snyder Associates presented the many factors affecting the pedestrian environment and how to address them, Dr. Sherry Ryan of Alta Planning + Design discussed all that is involved with developing pedestrian plans, and Dr. Richard Dowling of Dowling & Associates covered the pedestrian level of service (LOS) analysis method that is expected to be included as part of a new Multimodal LOS analysis method for Urban Arterials in the 2010 Highway Capacity Manual Update.

After a great Mexican buffet, we were fortunate to have Ken Voigt, ITE International President share his perspective on ITE as an organization in this country and globally. Ken stated that ITE is a resource for information on the American Recovery and Reinvestment Act and will be offering a series of free web briefings in the coming weeks. Other updates from Ken were that ITE has issued a position statement on the reauthorization of the surface transportation program, that ITE has several new and upcoming publications and webinars, new student chapter initiatives, and two new special task forces on Roundabouts and Energy, Environment, and the Economy. Ken also discussed ITE's membership trends and upcoming conferences and meetings.

Dr. Dowling then presented on the new multimodal LOS for urban arterials that has been developed for the 2010 Highway Capacity Manual Update. He went over the process for developing the methods for analyzing Autos, Transit, Bicycles, and Pedestrians, and how the information is presented as a report card with service grades for each mode. All the presentations from the March workshop and meeting are available on our website at itesandiego.com.

Unfortunately I was unable to attend the 2009 ITE Technical Conference and Exhibit that took place March 22-25 in Phoenix. I hope some of you had that opportunity.

I look forward to seeing you at one of our upcoming Events. Our next meeting is April 2 and will involve lunch at a location nearby, then a tour of the Caltrans District 11 Transportation Management Center. We have our Golf Tournament on May 1 at the Vineyard in Escondido. Please see the flyer in this newsletter for the details. And as we did last year, the section is co-sponsoring the Bike-to-Work Day downtown pit stop on Friday, May 15, 2009 from 6:30 – 9:00 AM at the Concourse near the corner of B Street and Third Avenue. Volunteers will be distributing refreshments to bikers and encouraging them to complete a survey. If you are interested in helping out, please contact our Public Outreach and Education Chair, Kim Romano of URS at Kim_Romano@URSCorp.com.

SDSU-ITE Student Chapter Monthly Meeting

Many students have expressed great interest in obtaining an internship. Anyone who has an internship opportunity to offer please notify Sherry Ryan (one of our faculty advisors) at sryan@mail.sdsu.edu or 619-594-5037. Sherry Ryan will be handling our internship program and will notify the students when opportunities become available.

Please contact Kyle Perez (661)809-7517 or Leo Espelet (619-744-0136) with any questions.

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Announcements

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SB 275 WOULD CONVERT TRAFFIC ENGINEERING TITLE TO PRACTICE

By **Walter Okitsu**

Senator Mimi Walters has introduced California Senate Bill 275, presenting a chance to convert the PE registration in traffic engineering into a full-fledged license. The bill, whose language could be found at website <http://leginfo.ca.gov>, would convert the 9 title-protected branches (agricultural, chemical, control systems, fire protection, industrial, metallurgical, nuclear, petroleum, and traffic engineering) into practice licenses. The bill would also allow overlap between all branches within every PE's area of competency, as long as the practice is in connection with and incidental to the P.E.'s branch of licensure.

Under California current law, only civil, electrical, and mechanical engineers are allowed to practice, and only civil engineers are allowed to overlap their practice into electrical or mechanical engineering.

This bill would effectively create a licensing method similar to every other state in the USA, where boundaries between branches are blurred. Most states have a generic PE license that shows no branch of engineering on the PE stamp. Under SB 275, California would follow a more restricted model that closely resembles Nevada's, where PE's can collect licensure in one or several branches, with overlap recognized between branches.

The passage of the bill would allow California traffic engineers to qualify for the Professional Traffic Operations Engineer certificate, for which they are currently ineligible. It would also help to reinvigorate Oregon's traffic engineering license, which is languishing as the sole TE practice license in the country.

The co-sponsors of the bill are the California Farm Bureau Federation and the Chemical Industry Council of California. They are interested in the licensure of agricultural engineers and chemical engineers, respectively.

The opposition is likely to come from the Professional Engineers of California Government (PECG), and the American Council of Engineering Companies (ACEC) California, formerly known as CELSOC. They object to their perceived dilution of powers in the civil engineering license.

Continued on page 4

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If you would like to place an advertisement in an upcoming issue of the ITE San Diego Section Newsletter, please contact
Marc Mizuta of Kimley Horn
at marc.mizuta@kimley-horn.com or
Arun Gajendran of Rick Engineering Company
at agajendran@rickengineering.com

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Announcements

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A bill supporter is the Registered Traffic Engineers of America (RTEA), which has been using its membership dues for a lobbyist to gather support for SB 275. RTEA has been discouraging traffic engineers who support this bill from contacting legislators and Caltrans workers from complaining to PECG, because RTEA feels such contact does not help the bill's progress. Instead, RTEA's strategy has been to ask traffic engineers to find users of engineering services, such as major corporations and trade associations, to support the bill.

Walter Okitsu

ITE Western District Licensing & Certification Chair

wokitsu@crainandassociates.com

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CH2M Hill*

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John.elkhoury@ch2m.com*

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URS Corporation*

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Announcements

2009 ITE - San Diego Section Golf Tournament Vineyard Golf Course Friday, May 1st

New Exciting
3 Par Stud
Poker Side
Game

Check-in: 11:30 am
Lunch & Putting Competition: 12:00 pm
Shotgun Starts: 1:00 pm

For sponsorship or additional information, call Scott Eisenhart at 760.603.6253

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Name(s) / Average Golf Score:

1. _____ / _____
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4. _____ / _____

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Announcements

INSTITUTE OF
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San Diego Section

December 16, 2008

Re: ITE San Diego Section Newsletter Sponsorships and Advertisements

Dear Colleagues:

The San Diego Section of the Institute of Transportation Engineers (ITE) is seeking sponsors and advertisers for February 2009 through January 2010 newsletters. Newsletter sponsorship allows the opportunity to showcase your company's work in the "Feature Article" and includes a half-page advertisement for that issue. In addition, we continue to offer extended advertising options as outlined below which include the same size ad posted on our website for the same length of time.

Sponsorship or Advertisement Type (includes monthly newsletter and website)	Single Issue	Full Term (10 issues)
Single issue sponsorship - includes one half-page advertisement and the "Feature Article"	\$175	N/A
Business card advertisement	N/A	\$125
Quarter-page advertisement	\$75	\$225
Half-page advertisement	\$150	\$450
Full page insert	\$250	\$750

Sponsoring and advertising in the ITE San Diego Section newsletter, which is distributed ten times per year (January-June and September-December), offer your firm the opportunity to reach over 200 members in the San Diego region as well as their coworkers and acquaintances in the Transportation Engineering industry. Don't miss out!

We encourage you to contribute to keeping this valuable communication tool active and effective by sponsoring and advertising. Please send all advertising material (preferably in electronic format) and a check payable to the ITE San Diego Section to:

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San Diego, CA 92111
Email: kane@llgengineers.com
Phone: 858.300.8800 Ext. 231

Please don't hesitate to call or email me if you have any questions. My contact information is mgardiner@sandiego.gov and (619) 236-7065. Thank you!

Sincerely,

Maureen Gardiner
President
ITE San Diego Section



INSTITUTE OF
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SAN DIEGO
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Feature Article

Giving Meaning to Numbers... with Simulation

Walter B. Musial, P.E. , Senior Transportation Engineer
musial@llgengineers.com
Linscott, Law and Greenspan, Engineers

As traffic engineers and planners, we are faced with giving meaning to numbers for those who don't 'speak our language'. For instance, what does 33,000 daily vehicles on a four-lane roadway mean to a driver? How does 240 peak hour left-turns affect the overall intersection operations? Does adding 18,000 square feet of retail cause a significant CEQA impact? Will a downstream STOP sign cause queuing into an adjacent roundabout? How much improvement can be expected if additional lanes are provided along a congested corridor?

Fortunately we have many tools at our disposal to help us answer these questions. We have the 'bible' of traffic engineering, the Highway Capacity Manual (HCM) and a myriad of software programs (HCS, Synchro, Traffix, aaSidra, etc.) to help us translate intersection configurations and traffic counts into delays and Levels of Service (LOS). However, this only translates this data into a technical language that largely only we (the professionals) understand.



As software programs have evolved to provide more analysis parameters and refinements, so has the presentation of these results. Graphics have long been used to present traffic information from volumes, to delays, to LOS. However, in many cases the results are difficult to convey in any meaningful or intuitive manner, especially to decision makers or the public. Thankfully, recent traffic simulation programs have given 'life' to graphics. If a picture is worth a thousand words, then a video must

be worth a several thousand (someone please check my math)! Simulation programs such as SimTraffic, CORSIM, VISSIM, TransModeler, Paramics, Dynasim, AIMSUN are currently used by transportation consultants locally, nationally, and globally.

The ITE Transportation Capacity and Mobility Task Force Task prepared "A Report On The Use Of Traffic Simulation Models In The San Diego Region" in 2004. The report discusses trends, advantages/disadvantages, and provides guidance in the use of simulation. The report is very informative and is a highly recommended read.

Linscott, Law and Greenspan, Engineers has found 2D and 3D traffic simulation valuable in visualizing traffic flows and operations and has made our 'story telling' job easier. Our simulation projects have typically involved long-range planning, local street and freeway

Continued on page 8



Feature Article



infrastructure improvements, single or mixed-use developments, streetscape, roundabout, and traffic calming projects.

Traffic simulation is unique as it enables the engineer/planner to convey complex concepts in an easy to understand manner, regardless of the viewer's technical aptitude or background. This is also what makes simulation such a powerful tool in the public and political arena. It also allows users to visually contrast traffic operations as a result of proposed geometric improvements or between project build alternatives.

Traditional software programs have long lacked the ability to present the 'whole picture'. For instance, how does a bisecting LRT interact with traffic or does ramp meter queuing affect adjacent intersection operations? Simulation has proven valuable

in answering such questions, since it models multi-modes of travel (i.e. passenger vehicles, trucks, buses, rail, bikes, and pedestrians) within a cohesive transportation system (i.e. local streets, ramp meters, highways, and freeways).

Linscott, Law and Greenspan, Engineers (in our San Diego office) typically uses TransModeler for 3D simulation. TransModeler is a cost effective 3D simulation model that can import SANDAG's shape files or Synchro's input files. This enables the creation of the base network with lane configurations, volumes, and spatial coordinates with minimal staff time.

While simulation is impressive, it does come at a cost. Simulation is very graphic/data intensive and requires high-end computers for rendering. It also requires extensive staff time to create and calibrate the model. Considerable effort is also required to 'beautify' the model with buildings, roadway signs, and landscape renderings (some of which need to be created by the user). Simulation can take longer and cost more than expected; so caution should always be taken in scoping, scheduling, and costing for a project.

Overall, Linscott, Law and Greenspan, Engineers' certainly finds value in offering 2D and 3D simulation to our clients. We hope the next time you need to 'give meaning to the numbers' you'll think of simulation. Feel free to contact me at musial@llengineers.com with any thoughts and comments.

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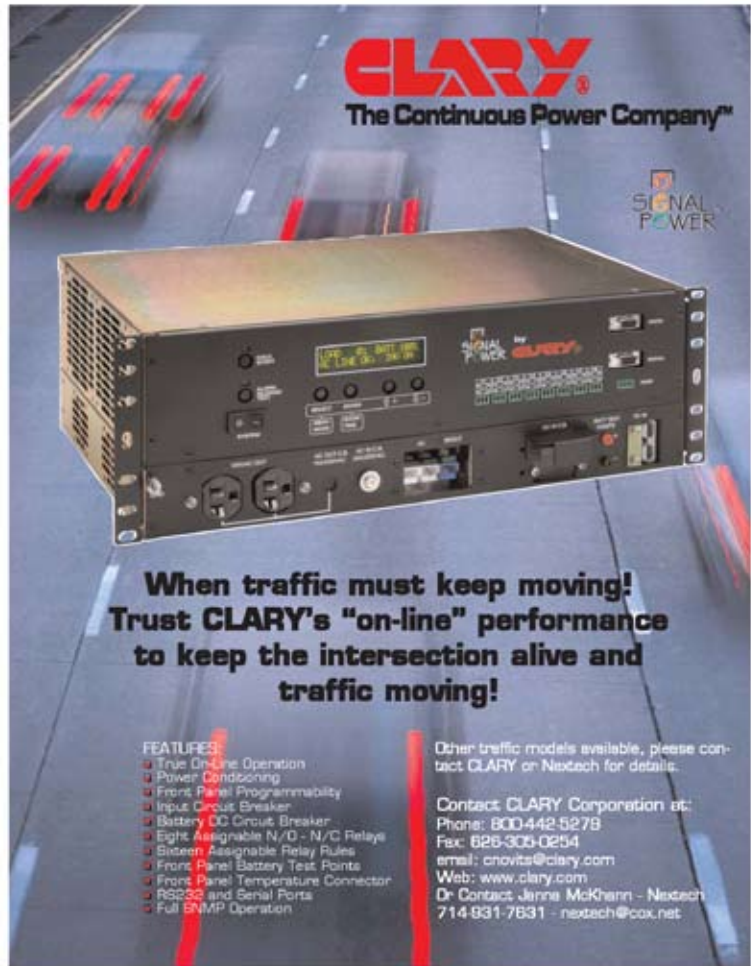
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