

Westernite

Official Publication of District 6 of the Institute of Transportation Engineers

November—December 2007 Vol. 61 No. 6

PRESIDENT'S MESSAGE

I hope you had a wonderful and safe holiday season filled with family and friends. I would like to give thanks during this time of year to the Western District Board, District committee chairs, Section and Chapter



Jennifer Rosales,
President

leaders, membership, individual and corporate sponsors giving generous donations, and for our strong District programs and activities. Please remember the District Endowment Fund during this time of giving. The future of the transportation profession depends on attracting and developing students who are excited and passionate about career opportunities in transportation. The Endowment Fund supports the District's Student Initiatives Program, funds student competitions and projects, waives registration fees for students and faculty for meetings, and promotes student/professional interaction.

I want to thank the New Mexico Section for hosting me in Albuquerque in September. The New Mexico Section keeps their luncheon meeting costs down

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DEALING WITH 'DEAD TIME' AT TRAFFIC SIGNALS

You are stopped at the signal with no traffic going through the intersection. You look left and right and there is nobody moving. Why are you stopped? Why is there all this 'dead time' when no one moves?

'Dead Time' in this report is that portion of the green time in the cycle when no cars are moving through the conflict zone (Figure 1). Dead time is an empirical measure that can be performed in the field as adjustments are being made. Measuring dead time is one way of quantifying the effectiveness of signal timing, and to do so in a short time, (usually half an hour of field time per intersection).

The purpose of this article is to propose a means of measuring the effect of signal timing changes at isolated intersections. Just as we have travel time as a means of

measuring the effect of timing changes on a series of signals, measuring dead time is a means of measuring the effect of timing changes on an isolated signal. A big step in solving a problem is identifying just what the problem is to be solved. Dead Time measurements enable us to identify the problem, how efficiently or inefficiently an intersection is operating.

An intersection can be operating at LOS E and yet be running efficiently, there are just too many vehicles. On the other hand, on paper, an intersection can be at LOS A and be running inefficiently with motorists waiting for the green when there is no one in the conflict zone. This intersection would really stand out by measuring the Dead Time.

We should remember that, typically,

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INTERNATIONAL BOARD OF DIRECTORS MEETING

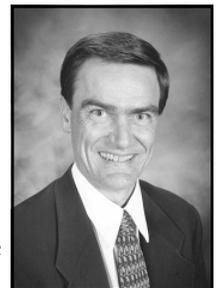
ITE to Update Strategic Plan

The ITE International Board of Direction met in Washington DC October 26 and 27, 2007. Over the two day meeting several issues were reviewed, considered and approved but none more important than that decision to update the ITE Strategic Plan. This update will be completed in 2008 and will address the next 3 to 5 year goals, actions and directions. Please feel free to take the time to contact (via email, phone or at meetings) your Western District Directors (Julie Townsend, Randy McCourt and Zaki Mustafa) with your ideas for ITE as they get ready for the planning process this coming year.

The October meeting kicked off with installation ceremonies for the new international officers (Alf Guebert and Ken Voigt) as well as our Western District

Director Zaki Mustafa who were all sworn in by outgoing Past President Rich Romer. Rich has ably served ITE and District 6 for well over three decades and was recognized through resolution of the Board in what was his last Board meeting. Rich will be moving on to serve on the Transportation Profession Certification Board which oversees the PTOE and PTP.

ITE is actively partnering and coordinating with various transportation research groups and professional organizations. Aliyah Horton was appointed to serve on the Safe Routes to



Randy McCourt,
Director

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INTERNATIONAL BOARD OF DIRECTORS MEETING

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School advisory group for ITE. Numerous manuals, handbooks and reports have come out and will come out in the next year or two. With the number of upcoming manual updates in 2008 and 2009, senior ITE staff are helping organize ITE participation.

New Publications of Note: (available now at www.ite.org)

- Speed Hump Recommended Practice Handbook
- Highway-Railroad Grade Crossing Handbook
- National Traffic Signal Report Card (in Press Room on web site)
- AAA Pedestrian Signal Safety for Older Persons

Upcoming Publications of Note:

- MUTCD (NPA is out, new manual due 2009)
- Management and Operations of ITS (January 2008)
- Traffic Signal Timing Manual (spring 2008, www.signaltiming.org)
- Traffic Safety Manual (spring 2008, www.safety.org)
- Transportation Planning Handbook (March 2008)
- Urban Geometric Design Handbook (April 2008)
- Traffic Signal Maintenance Manual and training series (late 2008)
- Traffic Engineering Handbook (early 2009)
- Traffic Signal Change Interval Manual (2009)

Traffic signal standards were approved by the Board. Both the Advanced Transportation Controller (ATC) Application

Programming Interface (API) Standard version 02.06a and the Vehicle Traffic Control Signal Heads (VTCSH) – Part 3: Light Emitting Diode (LED) Vehicle Arrow Signal Modules – A Performance Specification were approved. Work on maintenance and testing of LED traffic signal heads is underway in collaboration with various groups and should become available in the next 12 to 24 months. Contact Siva Narla (snarla@ite.org) at ITE if you have questions.

The year 2008 budget was approved including new programs for supporting members in public relations, developing and publishing several manuals/reports this year, enhancing the ITE web interface and developing the updated Strategic Plan. The budgeted revenues are approximately \$7.9 million with expenses projected to be \$8.6 million. While this includes a nearly \$700,000 deficit, last year's budget was approved with a similar deficit and came in with excess revenues of over \$200,000 due to the careful management of the ITE Executive Director and staff. With reserves at target levels, the Board believes the investment in key member services is warranted at this time, as represented in the approved budget.

This year a joint Western District 6 and International Annual Meeting will be held in Anaheim, California. The Board has decided to make a few format changes to the meeting, based upon surveys of attendees last year. We believe this will make the meeting as valuable to you as possible. Given the unique venue (Disneyland) it seemed a great time to pilot some new ideas. Expect to see our five technical tracks now fully aligned with the supporting ITE technical staff (noted in the following table). These are the areas from which ITE manuals and handbooks will

emerge and be updated. Special listening sessions will be part of the meeting to allow your input to the profession in solving problems. These are great opportunities to provide input that can be used by the authors of many of the upcoming manuals, handbooks and informational reports. Come ready to share your ideas and network about how we can make the transportation engineering profession better.

With the federal transportation funding bill coming up in 2009 for reauthorization, work has begun on position papers to help provide the legislature guidance from our industry on how to best serve our customers – the traveling public. This will be a very complex process with the lack of a fully funded program. Traffic signal systems, traffic management, better planning and safety programs are likely to attract great attention this time around. We will be called upon to wring the most out of our transportation system possible with the fewest dollars – and who better than ITE members to take on that task given our ability.

Finally, a great project experience in Indiana was forwarded by Director Michael Cline. He reported that on a six mile improvement project of I-70 in Indianapolis that they instituted a ban on semi-truck traffic as part of the work zone safety program. This is an urban freeway corridor that carries about 170,000 ADT. Between February 2007 to October 2007 there have been ZERO fatalities and only 21 collision related injuries. To accomplish this, stepped up enforcement has been in place which as recorded over 28,000 citations. Google “Super 70” for more information.

Technical Tracks	ITE Technical Staff
Traffic Engineering	Lisa Fontana Tierney
Transportation Planning	
Management and Operations	Douglas Noble
ITS Standards	Siva Narla
Safety	Edward Stoloff
Professional Development	Aliyah Horton

DEALING WITH 'DEAD TIME' AT TRAFFIC SIGNALS

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traffic signals are usually running isolated. In a typical city, even coordinated signals are only coordinated during the peak hours, usually two hours in the morning and two hours in the evening. These four peak hours are usually 40% of the ADT. The remaining 60% of the traffic volumes is handled by isolated intersections. It is these situations that are dealt with by measuring Dead Time.

BACKGROUND

In my experience as a traffic engineer, starting with the City of Oceanside in 1978, there is not enough time to do the job; there are always projects that sit on the back-burner. Quite often it is traffic signal timing that gets neglected. Yet, one of our main concerns is traffic signals because that's where the traffic volumes are highest and public focus occurs. Recently, I had an opportunity to make timing changes using volume density (gap reduction) and observed that re-timed intersections seemed to operate better, (a 'snappier' operation). However, there was a need to quantify just what the improvement was that was implemented.

A traffic signal's operating efficiency can be estimated using various methods: HCS, Critical Lane Summation, etc. These simpler methods have always seemed somewhat insufficient because so many factors in the real world (lane widths, curb parking, grade, etc.) are not taken into account. An alternative is to run a simulation using computer models but the preparation for an evaluation of an intersection's operation is very time consuming.

One software package has 20 variables for lanes, 12 for volumes, 12 for timing and 10 variables for phasing, a total of 54 variables. At the minimum, peak hour turning movement counts are needed: a minimum of two hours in the field for each time period. Typically, a half-day of work would be needed to inventory items such as number of lanes, lane width, grade, leading detector location, percent heavy vehicles, traffic volume for each movement, bus blockages, etc. Without input on each of these variables the results are based on assumptions, and we all know what happens when we assume.

TABLE 2

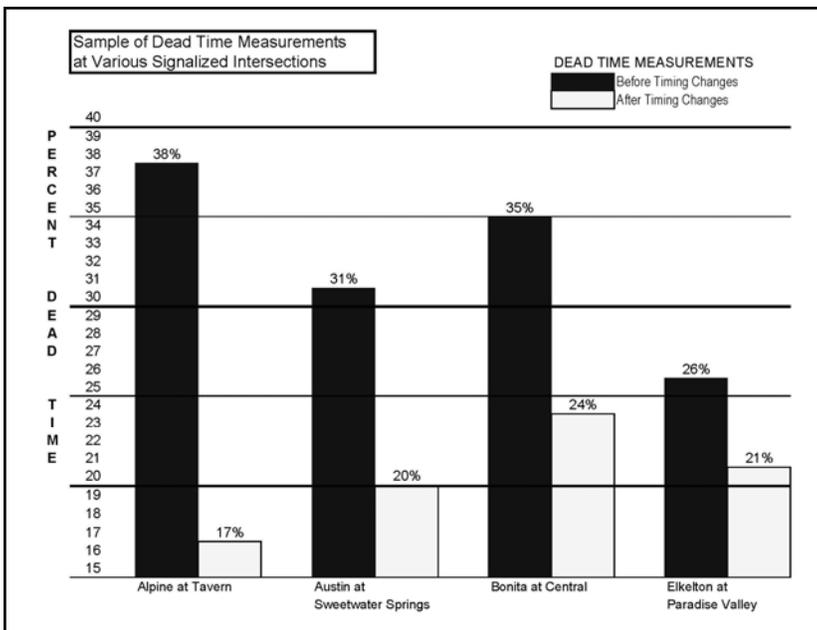


TABLE 1
DEAD TIME COMPARISONS

BEFORE			AFTER		
Date	5 minutes starts at	'Dead' time seconds	Date	5 minutes starts at	'Dead' time seconds
3/14/2005	16.30	93	5/8/2006	16.04	49
MONDAY	16.38	68	MONDAY	16.11	56
Austin Dr at Sweetwater Springs	16.47	112	Austin Dr at Sweetwater Springs	16.17	65
	16.56	104		16.23	55
				16.29	50
	total seconds	377		total seconds	275
	No. of periods	4		No. of periods	5
	Average	94.3		Average	55.0
	percent of 5 minutes	31.4%		percent of 5 minutes	18.3%

BEFORE			AFTER		
Date	5 minutes starts at	'Dead' time seconds	Date	5 minutes starts at	'Dead' time seconds
3/22/2005	13.14	89	5/9/2006	13.00	85
TUESDAY	13.20	113	TUESDAY	13.06	62
Bonita Rd at Central Avenue	13.26	104	Bonita Rd at Central Avenue	13.12	84
	13.31	117		13.19	72
				13.26	68
	total seconds	423		total seconds	371.78
	No. of periods	4		No. of periods	5
	Average	105.8		Average	74.4
	percent of 5 minutes	35.3%		percent of 5 minutes	24.8%

Feeling the need for a simpler, more objective method, I recalled how we measure a system's efficiency with travel time studies. In a travel time study our only tool is a stopwatch to determine how long it takes to get from point A to point B. Travel time studies are before and after studies with all the factors of a street system ignored because we are only interested in the change in travel time. Despite their simplicity, travel time studies give us a very good, real time, measure of a signal system's efficiency.

'DEAD TIME' MEASUREMENTS

Measuring dead time is a proposed Measure of Effectiveness (MOE), an attempt to answer the question of how efficient a traffic signal is being operated. Dead time is that time when the conflict zone is not being utilized. It is an empirical measure analogous to Travel Time studies.

Dead Time is measured with a stopwatch and a countdown timer. Counts are made in 5 minute intervals. The stopwatch is started when a gap of more than a second is observed and the last vehicle has cleared the conflict zone (usually when the vehicle enters the crosswalk). The stopwatch is stopped when a vehicle enters the conflict zone. A minimum of 5 time intervals is desirable. Right turning vehicles are ignored because they do not impact the conflict zone. For the measurements to have meaning there has to be a steady demand on at least two conflicting approaches.

As long as the measurements are consistent, perfect accuracy is not necessary since we are only comparing dead time before a timing change and after a timing change. By measuring in the real world, all the variables (see those listed above) are inherently considered. By counting on the same day of the week and at the same time, the only variable is the signal timing. For an 8-phase intersection, a cycle length of around 110 seconds could be considered typical. Similarly 24 seconds of clearance time could be considered typical. In other words we could expect that 24/110 or 22% of the cycle time would be dead time, values greater than that indicate

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PRESIDENT'S MESSAGE

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through sponsorships for each meeting. It was my pleasure to recognize James D. Brogan, P.E., PhD with a Presidential Proclamation for his distinguished service and contributions to ITE. In December, I will be visiting the Border Section and Washington Section. I am happy to report that the Border Section has increased membership by 56 percent in 2007. Also, I am looking forward to visiting and meeting members from other District Sections and Chapters in the New Year.

I would like to thank Pat Gibson for all of his efforts and hours of volunteering as the District Endowment Fund Chair. We appreciate his time and commitment that he gave as the Endowment Chair to the District. We look forward to his continued participation in District Activities. At this time, I would like to welcome Cathy Leong as the new Endowment Fund Committee Chair. Cathy is energetic, committed, and brings new ideas to the Endowment fundraising. She has been working with the Endowment Fund Committee consisting of Julie Townsend, Jenny Grote, and Michael Sanderson. A new logo for the Endowment

Fund is being developed as well.

I am happy to announce that the District has a new Vendor Chair, Marc Lichty. Marc brings experience to the position as the past Portland Local Arrangements Committee (LAC) Vendor Chair, participating vendor in District annual meetings, and vendor in many other exhibitor shows. Marc will be coordinating with each annual meeting LAC for the refinement of best practices of our vendor exhibits; providing outreach to western states vendors for participation in ITE events; and giving input to the board on vendor related issues of importance to ITE.

The District mentoring program is looking for professionals to participate in the 2008 mentoring program. This program is a one-on-one program that furthers personal growth and career development. We are looking for both individuals having a desire to learn more about the industry and career paths (mentees) and seasoned professionals that are interested in mentoring and passing on their wisdom (mentors). Please contact Craig Grandstrom, Career Guidance Chair, if you are interested in participating in the District mentoring program.

The District's student data collection fund received several proposals from six student chapters this fall. This is a great participation from our student chapters. The proposals included a mix of data collection surveys including coffee kiosks, Home Depots, gas stations, downtown residential buildings, and elementary/middle/high schools.

We have begun planning for the 2013 Western District Annual meeting which will be held outside of California. If your Section or Chapter is interested in hosting the 2013 Annual Meeting, then please send me a letter of intent by December 31, 2007. The link to the Western District LAC handbook can be found at: <http://www.westernite.org/leadership/annualmeeting.htm>. At this time, I am only looking for letters of intent from Sections or Chapters - please let me know if you have any questions. I've already received one letter of intent, but it's not too late.

Please mark your calendars for the 2008 District Annual Meeting (joint with International) in Anaheim from August 17-20, 2008.

Best wishes for a happy New Year!

DEALING WITH 'DEAD TIME' AT TRAFFIC SIGNALS

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that green time is being wasted at the intersection. Shown on Table 1 are the results of before and after studies at two signalized intersections in the County of San Diego.

The intersections in bold are operating poorly with dead time percentages greater than 30%. The intersections shown in italics are operating well with less than 20% dead time. Several similar studies indicate that a typical County intersection has about 33% dead time. After volume density timing was implemented this figure dropped to about 22%.

An enhancement to this manual method of measuring dead time would be to reprogram a video detector. It seems that it would be rather simple to focus the camera on the conflict zone, define it as one would a detector zone and then have the video software measure how often the conflict zone is used, or unused. This method would provide readings at many different times of the day and be an even better way of monitoring the effect of timing or other

changes at a signalized intersection.

Conversations with a vendor indicate that this is possible.

CONCLUSION

Measuring dead time at an intersection is another tool, a simple, empirical tool, that can be used to measure a traffic signal's operation. By spending a half hour in the field before a timing change and another half hour after the change, one can obtain a real world measure of the effects of timing changes at a traffic signal.

Edgar Monroy L., P.E.

Mr. Monroy's family came from Mexico City to California in 1956. He obtained his civil engineering degree from Cal Poly Pomona in 1970. Since then he has worked for many agencies in southern California as well as some stints with private firms. As city traffic engineer he seldom had time to work on his favorite topic, signal timing. His last assignment with the County of San Diego was as the Traffic Signal Systems Engineer where he finally had the time to utilize all the capabilities of the 170 controller.

Mr. Monroy became a registered civil engineer in 1976 and a registered traffic engineer in 1986. He is a fellow in ITE. When not at work he prefers to spend his time refereeing soccer games, playing basketball and clearing brush on the California gnatcatcher's property in Jamul.

ITE LEGISLATIVE NEWS

While legislatures around the District are generally not in session during the latter part of the year, the passage of the new state budget in California has created a furor in transit circles, leading to a lawsuit against the State by the California Transit Association, which represents most transit agencies around the state. Without going into all possible details, the Legislature removed approximately \$1.2 Billion in 'spillover' gas tax revenues from transit funding programs and reallocated it to several General Fund uses (one of which was school busing programs), which adversely impacts both transit capital and operating funds. State transit interests decided to fight the action as potentially illegal, and noted that the 2006 passage of Prop. B bond funds by voters was intended to provide and fund new transportation projects, not backfill diversions of revenue caused by the state's pursuit of a balanced budget. In addition, the successful 2006 ballot measures contained a 'firewall' provision against spillover revenue diversion, which raised concern about

legislative consistency. Most agencies are amending their budgets and/or capital programs and seeking alternate funds, at least until the suit against the state is settled.

At the Federal level, during the summer both the House and Senate approved their respective versions of the FY08 THUD (Transportation, Housing, and Urban Development) bills. The House version provided \$9.731B, consistent with SAFETEA-LU provisions and slightly higher than FY07 levels. The Senate version provided \$9.593B, slightly more than FY07 levels and slightly under SAFETEA-LU allowances due to a freeze in one transit program called New/Small Starts. At this writing in late September, a conference reconciliation process has not yet occurred, and Congress has not passed any FY08 appropriation bills, due to White House veto threats concerning excessive funding.

Also passed during the summer was a SAFETEA-LU technical corrections bill which, among other items, provided funding for the expedited emergency repair of the Bay Bridge eastbay maze freeway connector

that was destroyed by a tanker truck fire. On August 3, new Transit Security legislation was signed into law authorizing \$3.4B for transit security grants over the next four years. In addition, both chambers (HR 3221 and HR6) have passed legislation providing additional funding for transportation programs related to energy independence, renewable fuels, and other 'green' approaches to save fuel and energy, including federal tax credit bonds to be issued by local governments.



Walt Stringer, Legislative Chair



All Aboard the Ski Train!

The Colorado-Wyoming Section invites you and your family to join us on Saturday, January 26th, 2008 for our 6th annual winter party train ride from historic Denver Union Station in the heart of Lower Downtown to magnificent Winter Park Ski Resort and its wilder sister resort, Mary Jane. Ride in luxurious Club Car splendor (big comfy seats, and each car has its own bar) with your ITE pals, without the hassle, headaches, delays, and peril of I-70 driving. The train leaves Denver at 7:15 a.m. and returns from Winter Park at around 6:30 p.m. Heavily discounted tickets for the train ride are only available through the Section's Activities Coordinator, Eric Boivin, at 303.216.2439 or ericboivin@alltrafficdata.net. For more information about the Ski Train, visit www.skitrain.com or call 303.296.4754. Learn more about Winter Park (not just for skiers) at www.skiwinterpark.com. Space is limited, so call today, and we'll see you on the Ski Train!



WANTED—ITE DISTRICT 6 WEBMASTER

ITE District 6 is taking applications for a new District 6 Webmaster. The role of the District 6 Webmaster is to insure proper visibility of District 6 and make the District 6 web site a hub and reference point for many of the District 6 Sections and Chapters on the Internet. The District web site is www.westernite.org. The tenure of this position is a three year term to begin May 1, 2008. The duties of the position include:

- Select the proper Internet Service Provider to provide efficient navigation for users, and maintain the site.
- Coordinate with the District 6 Website Committee and the District Board to project the desired image of District 6 on the web. The District 6 Website committee consists of the Webmaster, the WesternITE Managing Editor, and International Director (normally the mid-term Director), a District Officer (normally the Vice President) and two “at large”

members. The District Officer will chair the Website Committee and be responsible for appointing the two “at large” members. The two “at large” members will be appointed for two-year terms.

- Coordinate with the WesternITE Managing Editor to post the WesternITE Newsletter on the Internet. The Managing Editor will be responsible for providing WesternITE in Adobe Acrobat PDF (or other agreed upon) format and it is the responsibility of the webmaster to post the newsletter on the web site.
- Prepare enhanced web pages for the site to enhance its value and usefulness to District 6 Members and its Board of Directors, including conversion of incidental documents to HTML or Adobe Acrobat PDF format for web posting.

- Coordinate with Section's webmasters to insure proper linkage and management of information on the site.
- Coordinate with WesternITE Technical Editor to post advertisers links and ads on the WesternITE website, if needed.
- Prepare web traffic reports (at the mid-year meeting and the Annual Meeting) to the Board to keep them informed about the site users.
- Selection of the Annual Best Section Web Site Award.

Please send a letter of interest with resume stating your qualifications to perform these responsibilities to Monica Suter, District 6 Vice President at msuter@santana.org.

CALL FOR TECHNICAL PAPERS

INTERMOUNTAIN SECTION – 2008 ANNUAL MEETING INSTITUTE OF TRANSPORTATION ENGINEERS

Members and friends of ITE wishing to make a technical presentation or be involved in the special technical presentation/panel discussion on “Designing for All Users” at the annual meeting on May 15-17, 2008 should submit an application by **February 15, 2008**. Presentations should be limited to no more than 20 minutes, with 5

additional minutes for questions and answers.

Please Contact:

Alyssa Reynolds, PE
Orth-Rodgers & Associates, Inc.
3130 S. Durango Dr., Suite 404
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areynolds@orth-rodgers.com

EDITOR'S NOTE

Happy New Year! As 2008 begins, WesternITE realizes that we have some resolutions to make for our newsletter over the next twelve months. The September/October issue which included the summaries of the Annual Meeting, was mailed with some printing errors as many readers pointed out. We want to apologize to our advertisers and companies in the directory for these errors. They will not occur again. We will make very effort to improve the content and delivery of the newsletter in 2008.

INVENTING THE INTERSTATE HIGHWAY INVESTMENT SYSTEM

By the early 1950s, there was general agreement on the need to improve the nation's highway system to facilitate commerce and to enable emergency evacuations or military deployment if necessary. The problem wasn't *what* to do, it was *how* to do it. Two major concerns had intertwined to create a decades-long impasse. States-rights politicians as well as some segments of the transportation industries and the general public resisted federal control over the location, design, and funding of the proposed interstate superhighway network. Even more troublesome was the debate over how to pay for the system.

Dwight Eisenhower, who became President in January 1953, believed that building the Interstate System was vital to the national economic and defense interests and, therefore, federal leadership was appropriate. And, as a fiscal conservative, he wanted the program to be "selfliquidating"—that is, to be financed in a way that would not add to the national debt. Frustrated with the inability of his advisors to agree on a workable plan, Eisenhower unexpectedly handed the problem to state leadership. In a speech written by him but delivered by Vice President Richard Nixon to the 1954 Governors' Conference, Eisenhower stated his objectives: a highway system developed cooperatively through a federal-state alliance, and a funding plan that would pay for the highways either through tolls or increased revenue from gasoline taxes. He ended with this request: "I hope that you will study the matter, and recommend to me the cooperative action you think the federal government and the 48 states should take to meet these requirements, so that I can submit positive proposals to the next session of the Congress."

The speech completely blindsided the governors because they had no advance notice or preparation for the President's bold challenge. Furthermore, as a group, they favored repealing the federal gas tax so they could increase their states' gas taxes to finance their own highway expenses. Sherman Adams, the President's top aide and a former governor, acted quickly to mollify the governors and explain the importance of their consultation in formulating a plan based on federal-state cooperation.

Even as the governors began to gather information and develop the requested plan, Eisenhower initiated new federal efforts. He established a committee consisting of representatives from the Departments of Commerce, Defense, and Treasury, as well as the Budget Bureau and the Council of

Economic Advisors. It was to report to another new body, the President's Advisory Committee on a National Highway Program, which would also interact with the governors' committee. Chaired by Lucius Clay, the President's Advisory Committee became known as the Clay Committee.

The Clay Committee's report, which was transmitted to Congress in February 1955, recommended that a Federal Highway Corporation be created to issue \$25 billion in bonds to finance the federal share (30 percent) of the cost of improving the nation's highways, including building the Interstate System. The bonds, which would be retired over a period of 30 years through federal gas taxes, would not be included in the national budget. This proposal drew heated opposition from Congressional leaders including the chairman of the Senate Finance Committee, Virginia's Harry Byrd, Sr., who said, "Such procedures violate financing principles, defy budgetary control, and evade federal debt law." He also pointed out that because "we have not paid off a single dollar of federal debt in 25 years," it was a "violent assumption" to think the bonds would be retired in 30 years. The Clay Committee's recommendations were soundly defeated in both Houses.

Alternative proposals fashioned by Senator Albert Gore, Sr., and Representative George Fallon also failed to pass both legislative chambers. The following year, the Bureau of Public Roads distributed the *Yellow Book* to Congress. The book, which showed 122 urban Interstate routes proposed for cities in 43 states, was instrumental in convincing legislators of the system's value to their constituents. (Eisenhower had been told that the book documented the legislative history of the Interstate System, and he did not read it. When he did learn of the substantial investment in urban Interstate mileage in 1959, it was too late to recast the System into his original vision of a primarily rural system.) The Representatives debated a new Fallon bill, which raised the federal share of the program to 90 percent and committed nearly \$25 billion over a period of 13 years. The bill passed the House after being amended to create a Highway Trust Fund to dedicate certain highway user taxes solely to paying for the Interstate System. Those user taxes included the entire federal taxes on gasoline and diesel fuel (both of which increased from 2 to 3 cents per gallon); some other existing taxes (which also increased) on items such as tires, inner tubes, and new commercial vehicles; and new taxes on tire retreads and annual use of heavy

vehicles (those exceeding 26,000 pounds).

The Senate passed a similar bill, with the key addition that annual disbursements from the Highway Trust Fund would be limited to the balance in the Fund to preclude any deficit in the program. After successful conference committee action, both Houses passed the Federal-Aid Highway Act of 1956, which established and funded the National System of Interstate and Defense Highways. On June 29, 1956, President Eisenhower signed the legislation in his hospital room, with little fanfare but great satisfaction.

The Adobe Tower



About the Authors:

Jerry Hall, a professor of Civil Engineering at the University of New Mexico, has served District 6 as president and international director.

Loretta Hall, a member of the Construction Writers Association, is a freelance writer concentrating on engineering and construction.

They can be contacted at jerome@unm.edu and lorettahall@constructionwriters.org, respectively.

This is the seventh in a series of articles tracing the development of the Interstate Highway System.

MEMORIES OF THE 2007 ANNUAL MEETING



SECTION AND CHAPTER ACTIVITIES



HAWAII SECTION

August 2007

Deputy Prosecutor Renee Sonobe Hong of the City's Prosecutor's Office and Sergeant Bob Lung of Honolulu Police Department spoke at ITE Hawaii Chapter August Meeting.

Ms. Hong began with an overview of the prosecutor office's functions and legal jurisdictions. She cited the prosecutor's duties pertaining to traffic violation, DUI, and crash fatality cases. She explained the procedural arraignments and proceedings through the court system. She highlighted various types of traffic violations, in particular, DUI cases. She noted the significant role that the district court judge plays in making the final ruling and issuing the appropriate penalty. She elaborated on the consequences of a no-contest plea in the criminal case and its implication in a subsequent civil case. She shared some reasons claimed by defendants in pleading their innocent. A frequent claim made by defendants is that the traffic controls were not clearly visible. In general, she believes that the penalties are adequate to curtail and deter reckless driving. She concluded that only specific, relevant, and factual evidence must be presented to the judge by any defendant for a favorable outcome.

Mr. Lung presented various statistics regarding the quantity of arrests for DUI, speeding violations, and pedestrian-related violations. Also, Mr. Lung reported that State of Hawaii ranks high in the rate of deaths attributed to DUI accidents. Mr. Lung elaborated about the new pedestrian laws recently passed by the legislature. He spoke on the intent, meaning, and conditions regarding the new pedestrian laws. Also, Mr. Lung explained the situations where HPD would issue a ticket for a violation. Mr. Lung identified several examples of how and when the new pedestrian laws would be applicable under typical and questionable circumstances. Mr. Lung also cited what type of driver behaviors would constitute red-light running or stop sign violations. Mr. Lung covered the penalties for various violations, which may include monetary fines, suspension or revocation of the driver

license. According to the latest statistics, HPD is stepping up its enforcement efforts. Mr. Lung closed with an update of the latest attempts by the legislature to revive the van-cams and red-light running camera enforcement programs.

September 2007

Mr. Leslie Segundo of State Hawaii Office of Environmental Quality Control spoke at ITE Hawaii Chapter September Meeting. Mr. Segundo introduced that OEQC's primary function is to help stimulate, expand and coordinate efforts to maintain the optimum quality of the State's environment. OEQC implements the Environmental Impact Statement law, Chapter 343, Hawaii Revised Statutes (HRS). Office planners review and comment on hundreds of environmental disclosure documents each year.

Mr. Segundo demonstrated the State Environmental Review Process flowchart and explained the circumstances that trigger Environmental Access (EA) and Environmental Impact Study (EIS).

Mr. Segundo also indicated that there are differences in definitions, understandings, and requirements between Federal and State Environmental Laws. These differences often cause confusion in the public perspective. A streamline approach is more reasonable and sometimes acceptable to both Federal and State.

October 2007

Oahu Metropolitan Planning Organization's (OMPO) Citizen Advisory Committee vice Chair Mr. Joe Magaldi and City DTS Engineer Ms. Jolie Yee spoke at ITE Hawaii Section October Meeting.

Mr. Joe Magaldi informed us about importance of the Citizen Advisory Committee of OMPO. Citizen input to transportation planning is a necessity. To help achieve this, the Policy Committee approved the formation of the Citizen Advisory Committee in 1977. The CAC is the foundation of OahuMPO's public involvement process. The CAC is a volunteer group consisting of representatives from community organizations, professional associations, neighborhood boards, and the private sector. It provides an avenue for obtaining public input for Policy Committee deliberations on transportation issues. Besides providing input directly to the Policy Committee, the CAC assists in developing public involvement programs to solicit

general public input for the Policy Committee. Comments received from the CAC members and non-members are treated equally. The CAC meets about once a month. These meetings are open to the public and provide an opportunity for interested parties to hear and discuss transportation issues with the appropriate project administrators or decision-makers. The CAC members are organizations and groups interested in transportation planning, representing various segments of the population on Oahu. CAC members are appointed by the Policy Committee.

Ms. Jolie Yee educated us about the next generation of buses - hybrid buses. The City is expending hybrid buses fleet. Ms. Yee compared pros and cons between the regular diesel buses and the hybrid buses. While the hybrid buses offer high mileage, low emission, quieter exterior, better handling, they also cost more, and requires different maintenance techniques, and higher clearance in some cases. The City is gradually replacing its current 500 plus diesel bus fleet with hybrid buses.

Honglong Li,
Secretary



NEW



MEXICO SECTION

October 2007

Twenty-three members and guests attended the October 4 Section Luncheon at Flying Star Restaurant in Albuquerque.

The luncheon technical program was presented by Mr. Scott McClure, P.E., Bureau Chief, New Mexico Department of Transportation (NMDOT) Research Bureau. Mr. McClure presented and discussed the NMDOT's Weigh-In-Motion program. As part of the presentation, "Expanding the Use of Weigh-In-Motion (WIM) Data", Mr. McClure presented some background information on the program and showed some screen shots of the program that

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collects and utilizes the information gathered by various WIM sites.

November 2007

Twenty-two members and guests attended the November 1 Section Luncheon at El Pinto Restaurant in Albuquerque.

The 2007 - 2008 New Mexico Section Membership Directory was made available to the members at the meeting.

The membership voted on and approved a donation for the 2008 Engineers Week Celebration.

The luncheon technical program was presented by Mrs. Leba Freed, WHEELS Museum. The topic of her discussion was a Status Report on the forthcoming transportation WHEEL Museum in Albuquerque". Mrs. Freed provided an informal status report on the transportation WHEELS Museum and the latest news concerning the future establishment

December

Section President Steve Eagan called the December 6, 2007 meeting to order. He asked for a moment of silence to be observed in memory of Mr. Tak Yi and his wife Pung Yi, found dead in their Albuquerque home on Tuesday. Mr. Yi had worked 15 years for NMDOT, and their son Keun-Wook is currently the NMDOT Central Regional Division General Manager.

Program

"City of Albuquerque 2007 Infrastructure Bond Program" by Michael J. Riordan, P.E., Deputy Director, Department of Municipal Development and ITE Member.

On October 2, 2007, the voters of Albuquerque approved general obligation bond measures totaling \$158,545,000. Of this, \$63.1 million will go to DMD for projects, including \$39.5 million for streets and \$10.3 million for storm drains. In the streets program, 53% will be for rehabilitation projects and 42% will address deficiencies, while only 5% will go toward new growth.

The Streets Program will include:

- Median & Interstate Landscaping – \$7.9M – Arterials will include Candelaria Road and Golf Course Road.

- Lead & Coal Avenues Reconstruction – \$4.0M – This funding is the first part of a \$25 million project over the next decade to convert the couplet from three-lane to two-lane with bicycle lanes and wider sidewalks between Washington Street and Broadway. Consultant selection is to be announced tomorrow.
- Trails & Bikeways – \$1.9M – 5% of the streets program will go to match federal funds on a variety of bicycle projects. Anticipated projects include the Singer Bikeway from Chappell to Jefferson (\$600k), update of the Bicycle and Trail Facilities Plan (\$400k), various on-street restriping projects (\$200k), and the University Blvd Bikeway Study from Gibson to Rio Bravo (\$200k).
- Impact Fee Waivers – \$1.6M – 1% of the overall bond program will go to offsetting impact fees charged to developers.
- Major Street Reconstruction – \$1.5M – Wyoming Boulevard (currently in design) and Alameda Boulevard are included.
- Major Intersections – \$1.5M – The City is currently acquiring right-of-way for San Pedro & Constitution. The City received additional funding from a State Farm grant for safety improvements at Montgomery & Eubank. Design is to begin in February. Central & Eubank is also included.
- Irving Blvd NW – \$1.5M – Irving will be widened from Lyons (Unser) to Rio los Pinos.
- SW Arterials – \$1.5M – This budget includes GRIP2 matching funds for the construction of Unser Blvd SW, plus projects on 98th Street, Sage Road, 86th Street, and others.

Other allocations include \$11.9M for ongoing maintenance, \$750k for 86th & Sage SW, \$600k to put the Atrisco Dr SW out to bid, \$500k for Fortuna Road west of Unser, \$500k for advance right-of-way acquisition, \$500k to implement improvements from PB's Level of Service and Safety Study, \$400k for ITS Expansion, \$390k for 12th & Menaul Streetscape, \$250k for Paseo del Norte interim improvements at Jefferson, \$250k for Traffic Calming in Barelmas, and \$250k for neighborhood traffic improvements. In addition, \$2.8M is divided among the

seven council districts for "neighborhood-type" projects.

The \$10.3M Storm Drain Program is divided 53% for rehabilitation projects and 44% to address deficiencies. Three percent, or \$350k, is allocated to mandated NPDES Storm Water Quality Programs.

Following the 2007 storms and flooding in Barelmas, the Storm Drain Program was refocused to allocate \$4.0M to District 3 flood protection. The Tingley Park lower surge pond has been completed, and groundbreaking has taken place on the park reconstruction. The \$1.1M Coal Avenue storm drain is in design by Thompson Engineering, and will be constructed with the couplet transportation project. Also in District 3, \$1.0M is allocated for pump station rehabilitation at Bell and Commercial SE, and \$800k for the Kinley Ave NE storm drain.

Other storm drain allocations include \$1.3M for the Hotel Circle NE storm drain. Phase I construction is complete, and Phase II is in design by Smith Engineering. There is also \$1.0M for the San Pedro storm drain in the North Albuquerque Acres.

Mike previewed projects in the 2007-2016 Decade Plan. Coors Blvd NW will be widened from 6 to 8 lanes. Unser Blvd NW will be reconstructed from Dellyne to Montañito. Alameda will be widened from Edith to I-25. Central and Juan Tabo will be improved, although the Gibson Loop Bypass plan has been abandoned after the federal government has quashed plans to cross the northern extension of Kirtland AFB east of Louisiana. The extension of Sunport Blvd west of I-25 to Broadway will be a NMDOT/Bernalillo County/COA project. Osuna will be widened west of I-25 to 2nd Street. The Singer Bridge over the North Diversion Channel will be widened. Mike said that improvement of the Central & Lomas intersection is in the plan, but the City doesn't know yet what will be done. A multilane roundabout has been considered, but it is not likely. Finally, Mike announced that the City will begin advertising this weekend for the Engineering Division Manager position, who will oversee both transportation and storm drainage.

A copy of this presentation is available on the NM-ITE website.

Ross E. Lujan, Secretary/Treasurer
Jim Barrerra, Vice President

SECTION AND CHAPTER ACTIVITIES



CALIFORNIA BOARDER SECTION

May 2007

Our May meeting was our traditional golf tournament, which took place on May 4, 2007 at Mt. Woodson Golf Club. The weather was a little chilly in the morning, but it warmed up later in the day. There were 80+ people who came out to golf. Prior to golfing, everyone enjoyed a delicious BBQ lunch and some people entered a putting contest. Several SDSU students came out to help sell raffle tickets and take pictures of the golfers. After the event, there was a social hour and the winners of the golf tournament were announced. For the raffle, we had a record-breaking amount of money collected (\$1,000+) and many people went home with a prize.

June 2007

Our June meeting was held at the Handlery Hotel in San Diego on June 7, 2007 with 63 people in attendance. Prior to the luncheon, there was a workshop that discussed Tort Liability with approximately 20 people in attendance. The topic for the luncheon was on SANDAG's modeling process, focusing on the travel demand model's latest enhancements. The presenter for this topic was Mike Calandra of SANDAG.

September 2007

Our September meeting was held on September 21, 2007 with 26 members in attendance. This meeting was not our typical meeting as we headed to Tijuana, Mexico. The purpose of this meeting was to meet students, faculty, and public officials, and to initiate an ITE Tijuana chapter. We were fortunate to have Zaki Mustafa join us for the tour. All of the ITE members and guests met in downtown San Diego and rode down together on a tour bus. After crossing the border and weaving through traffic on the local streets in

Tijuana, we finally arrived at the Instituto de Tecnologia's (Institute of Technology) campus. However, after looking at maps and talking with a few people, we realized that we were at the wrong campus. After re-boarding the bus and driving another 10 minutes, we arrived at the correct campus. While most of us were getting hungry, we were all satisfied after having a traditional Mexican lunch, which consisted of carne asada (beef) tacos, frijoles (beans), and assorted vegetables. After lunch, the members and approximately 60 students met in a classroom and Edgar Perez (Border Section President) gave a presentation in Spanish talking about the benefits of becoming an ITE member. We had over 40 students sign up to become members! After the presentation, we had to cancel the tour of Tijuana to see several transportation projects the director of Public Works had an emergency meeting to attend. However, on the bus ride back to the border, we were stuck in traffic and were able to see some of the projects that we would have seen on the tour. At the border crossing, we all got off of the bus and waited in line to cross the border back to the US. Surprisingly, the wait was only 20 minutes!

October 2007

Our October meeting was held on October 4, 2007 with 43 members in attendance. Instead of our typical presenter at our luncheon, we had a panel consisting of John Kim (City of Carlsbad), Beraki Woldeabzghi (Caltrans), Michael Kinnard (City of La Mesa), Paul Pace (City of Oceanside), Carl Hickman (County of San Diego), and Minjie Mei (City of Santee) discussing the topic of loops versus video detection. Minjie Mei, who is our programs chair, asked each panel to discuss the following topics:

- 1) Number of cameras that have been installed in respective jurisdictions and how long has video been in place
- 2) Experience using video detection, its pros and cons
- 3) Cost of installation and operation compared to loops
- 4) Current policy on using video

Each panelist provided answers to the topics listed above and the general consensus was that video detection has worked well at the locations where they have been installed. Currently, the City of

Carlsbad has the most locations with video detection with 102 out of the 160 signals containing video detection. On the other end, the City of Santee has 5 locations with video detection out of a total of 55 signals in the City. Some of the lessons learned were locations that had a lot of sun caused false calls on protected left-turns, spend more time in design for video detection, and it's fairly easy to change the detection zones with video detection during construction on roads, which reduces the overall congestion during construction.

*Marc Mizuta,
Secretary*



SOUTHERN CALIFORNIA SECTION

September 2007

This month's ITE Southern California Section meeting was held on Wednesday September 19th, 2007, at the Monterey Hill Restaurant in Monterey Park. The guest speakers John Fisher (CTCDC Member), Monica Suter (City of Santa Ana), Wes Pringle (Expert Witness), and Sgt. Mike Bell (Santa Ana PD) were welcomed by full house, totaling 111 attendees. The program addressed the challenge in posting proper speed limits; touching on the history of why the new speed limit postings methodology was changed and ultimately how safety and yellow times are affected. After the presentations were complete, the guest speakers answered questions from the audience and gave tips on approaches that have worked to set the posted speed limits.

Mr. Fisher began the program by discussing the fundamental principles for setting speed limits. Because speed limits

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are sometimes an emotional and politically charged issue, it is important to remember what speed limits are, and how they function in society. As a law, speed limits are ultimately intended to protect the public. To uphold such principles in practice is the duty of professional engineers. Given the intricacies surrounding any public policy decision, implementation of a speed limit can be a complex matter. Mr. Fisher stressed the importance for engineers to stand by their objective scientific findings, leaving the policy decision in the hands of clients and public agencies.

Ms. Suter spoke about the challenges to post and enforce reasonable and safe speed limits. According to Ms. Suter, inadequate coordination with law enforcement is a critical barrier for reasonable and safe speed limits. To overcome this Ms. Suter recommended meeting early with enforcement officials who have courtroom experience, and requesting their assistance from a “win-win” perspective to obtain high-ranking support.

The lack of public and elected official understanding is another barrier. In addition to educational outreach, Engineers can take the “heat” off of public officials and offer to reach out to citizens to explain justifications of speed limits. Sometimes however, the lack of ability to sell engineering principles highlights the need for engineers to increase their “sales” skills. Because of the current difficulties facing the implementation of speed limits, Ms. Suter also highlighted the need to evaluate yellow times based on prevailing approach speeds.

Following Ms. Suter, Mr. Pringle’s extensive experience as an expert witness gave interesting insights into the use of speed survey data in the courtroom, the responsibilities facing speed limit transitions, and the use of construction speed zones. Rounding out the program, Sgt. Mark Bell gave valuable real-world insight into speed limit enforcement, emphasizing the communication between traffic engineers and law enforcement agencies.

Michael Wulforst,
Scribe



WASHINGTON STATE SECTION

September 2007

As certain as flipping a light switch and almost as fast, the start of the new school year brought on congestion that we had forgotten about through the summer. Moms and dads altering their work schedule to ensure their little ones are safely chauffeured to their schools or even their bus stops. It may bring a tear to many eyes to see them off, but a rise in blood pressure as they rejoin the rest of the commuters; all of them; at exactly 8:25am.

The experience provided just the right footing to start this year’s ITE Washington sections first meeting under new leadership with a presentation entitled: Exploring Congestion Relief Using HOT lanes and Tolling in the Central Puget Sound Region. Don Samdal, Mirai Associates, and Shuming Yan, Washington State Department of Transportation, would alternate presenting on the topic.

Convening in the cozy room with a great view and great food of Salty’s on Alki Beach, this year’s section president, Dave Alm, recapped last year’s activities and introduced officers and committee members for this year. For those of you with short memories like me, you can find a listing of officers and committee members online (www.westernite.org/Sections/washington/).

Mr. Alm continued by providing an overview of what to expect for this year as well as self introductions from the 60 members in attendance. Following additional announcements, Jim Bloodgood, section secretary, transitioned the meeting to the key presentation.

Don Samdal began with an overview of the challenges that lay before the region with rising congestion and some of the general methods to answer the challenge. Shuming Yan continued with shortcomings of the presented methods. Even with adding lanes and improving transit at the cost of over \$100B, we would only be able to sustain current levels of service for regional mobility. As demand exceeds capacity, the throughput

decreases. To sustain the benefits of capacity and efficiency improvements, demand management must be incorporated.

An example of demand management that is being explored is congestion pricing in the form of high occupancy toll (HOT) lanes. Initially the HOT lanes will be converted high occupancy lanes (HOV) that allow free transit and carpool use with a toll for single occupant vehicles (SOV.) The HOV lanes require 45 mph 95% of the time to maintain reliability. The designation for carpool of 2+ or 3+ may change depending on how many carpools are pushed into the general purpose (GP) lanes and how many SOV pay to use the HOT lane.

Future projects may convert a GP lane into a HOT lane (HOT 1 option) or build a HOT lane to work in addition with a converted HOV, HOT lane (HOT 2 option.) The former is accompanied with a price tag of \$430M and the latter at \$22B. The HOT 1 option would provide improvements in travel time and reliability with a small improvement in delay. This may benefit individual trips such as to the airport. However, the HOT 2 option with its higher number of flowing lanes would obviously provide more benefits but at a significant cost.

In conclusion, system-wide toll scenarios are very effective in reducing total delay. Pricing causes people to drive less, shift travel to less congested time periods and to other modes as well as make shorter trips to the closer destinations. Picking the toll scheme that works for all roads and at all times will be challenging. In addition, the study did not assess social equity, economic impact and public acceptance. These issues need to be carefully studied before implementing region wide value pricing.

October 2007

As the sun began to set across Elliot Bay, we settled into our seats for this month’s joint ITE Washington Section and Women’s Transportation Seminar (WTS) meeting held in the Executive Dining Room of the World Trade Center for a panel discussion on the upcoming Proposition 1 (Roads & Transit) package. WTS Puget Sound President, Dana Hook commenced the meeting. Following brief announcements by ITE Section President, Dave Alm, Ms. Hook called for self introductions of the panel consisting of:

- Joni Earl, CEO, Sound Transit
- Paula Hammond, Secretary of Transportation, WSDOT

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- Harold Taniguchi, Director, King County DOT

Rita Brogan, (Pacific Rim Resources) announced the questions as she moderated the panel discussion. The questions ranged from, "What is ST2 and RTID?" to "How does Ron Sims position affect King County projects?" to "Is a Rail and Road package the wave of the future?"

As I listened intently to the well thought out responses to tough questions, I felt rather guilty that I was able to receive a wealth of information that the typical voter does not. Even though radio commentary announced the ad campaigns for Proposition 1 have exceeded the opposition, myself and my wife received very little information outside of messages left on our home answering machine. Where can the average voter learn that Sound Transit's ability to deliver ST2 will be improved over ST1 now that it's starting with over 300 employees rather than zero? Or that over \$34M and 3 years were spent in environmental analysis, outreach programs, feasibility studies, etc. to get to this package. Or that many roadway projects that have started will need RTID to finish.

The issues that were made clear in my mind were:

- The package took a lot of effort with input from the public.
- It took over three years and \$34M to get the ST2 package together.
- Many of the "Nickel" projects rely on RTID to finish the projects.
- We will never have a perfect package that appeals to every user.
- This package builds choices for future travel.
- We may not take direct advantage of the improvements, but subsequent generations will.
- Higher taxes may hurt spending, but new projects will distribute dollars back into the region.

Many voters may not understand things will get worse before they get better. In fact, it may get a lot worse with no apparent progress for quite some time. In a time when everyone owns a cellular phone and text messaging is a widespread form of communications, can younger voters endure endless construction zones for up to 12 years before taking advantage of those choices? Are we willing to invest in our region without seeing a return in the time most

people move homes once, buy three cars, and see their toddler obtain their driver's license?

Truly this package is a vote for our future. Without it, our transportation future is a dark cloud. A region's economy relies on good transportation. Many say the package costs too much, does too little, and takes too long. However, this package is as close to a comprehensive package we've seen. Many smaller and more focused projects can enhance its effectiveness, but still require an anchor package to build on. Furthermore, if we do nothing, it'll cost at least \$30M and several years to put another package together that has to appeal to the entire region again. Then add \$800M a year in inflationary impacts. In the meantime, our regional congestion grows without a comprehensive solution to address it.

Paul Cho, Scribe



September 2007

Our September meeting was held on the 27th at Monti's La Casa Vieja Steakhouse in Tempe, Arizona. This was the first meeting after our 2-month summer break. The speaker at the meeting was Rudolf Kolaja of Traffic Operations Engineering, LLC. Rudy has over 40 years experience in traffic and transit operations engineering including 25 years of service at the Arizona Department of Transportation. Mr. Kolaja related his experience of creating and working with the high-speed, underground Metro system currently in operation in Prague, Czech Republic. Rudy presented many examples of the integration of multi-modal transportation systems with parks, town squares and city centers in Europe. This presentation was especially appropriate considering the Phoenix Metropolitan area is currently designing and constructing a light-rail system. During the meeting, former ITE Arizona and ITE International President Jenny Grote installed the following officers: President, Micah Henry; Vice President, Paul Porell; Secretary, Chris Williams; and

Treasurer, Ray Yparraguirre.

October 2007

The October meeting was a joint venture with the Southern Arizona Chapter and the University of Arizona (U of A) Student Chapter, held at the U of A in Tucson, Arizona. The guest speaker for this meeting was Dr. Mark Hickman of the U of A, who recapped his recent 5-month sabbatical to Hong Kong. The presentation featured many detailed pictures of the different mode types available for the country's traveling public. Dr. Hickman's objective during his trip was to study both the supply and demand for public transit services in Hong Kong. His research focused on modeling the time, cost, and passenger preferences in the multi-modal transit system. The meeting had approximately 50 attendees from the Arizona Section, Southern Arizona Section and U of A student chapter.

November 2007

Our November meeting was held on the 15th at Resort Suites in Scottsdale, Arizona. The guest speaker for the meeting was Wayne Collins of Huiitt-Zollers Inc. Wayne's presentation, "What is that REALLY BIG TRUCK doing on my highway?", centered on issues involving oversized loads on Arizona freeways and what designers need to know in order to better accommodate them. The presentation included a collection of photos of large rigs and illustrated some of the challenges they face traveling throughout the state.

Upcoming events include the annual Holiday Party scheduled for December 20th at the University Club in Phoenix, Future City Competition and E-Week.

*Chris Williams,
Secretary*



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SAN FRANCISCO BAY AREA SECTION

September 2007

The SF Bay Area ITE Section started a new September tradition, "Thirsty Thursday". This year, 19 Section members and non-members came to the Pacific Coast Brewing Company in Oakland on September 27 to mingle with fellow professionals in a relaxed social environment and to kick off a new year of Section activities.

Randy McCourt, District 6 International Director, swore in three new officers elected for 2007-08. Richard Haygood (President), Wing Lok (Vice President), and Nate Chanchareon (Treasurer) officially took the helm of their respective Section positions.

The event also featured the presentation of the Traffic Bowl trophy, which the Section successfully recaptured at the District 6 Annual Meeting held in Portland, Oregon last July. The trophy had not been home in the Bay Area for several years! Congratulations to the victorious Bay Area team of Chris Pangilinan and Patty Camacho of DKS, Ray Davis of the City of Belmont, and Ricardo Olea of the City of San Francisco MTA!

The next Section meeting will take place at the San Francisco County Transportation Authority on Thursday, October 18. This joint meeting with WTS will feature presentations on value pricing of transportation facilities in the Bay Area, including specific applications currently under consideration in San Francisco and Santa Clara County.

October 2007

The October meeting was held in San Francisco County Transportation Authority (SFCTA) Conference Room. More than 80 members showed up at the luncheon. This special event hosted jointly by the San Francisco Bay Chapters of ITE and WTS on the "HOT" topic of value pricing.

Two topics were presented:

- City of San Francisco Congestion Pricing presented by Tilly Chang and Elizabeth Bent, SFCTA
- High Occupancy Toll Lane Projects in Santa Clara County presented Murali

Ramanujam, Santa Clara Valley Transportation Authority (SCVTA).

The event was moderated by Lisa Klein, MTC. She gave us a regional perspective about the background of congestion pricing.

In early 80's, the MTC evaluated a congestion pricing policy on the Bay Bridge. However, due to the lack of political support, the project was cool off since then. Recently, the Bay Area was fortunate to be named one of the 5 Urban Partners in the US, and is eligible to receive over \$150 million in federal funds through the Urban Partnership program to jump-start some pricing initiatives.

If you are interested in the detailed of the presentation material, please visit our website.

November 2007

The SF Bay Area ITE Section (SFITE) and South Bay Traffic Officials Association (SBTOA) jointly presented their annual awards for Transportation Project of the Year and Transportation Professional of the Year at the monthly Section meeting held November 15, 2007 at the Silver Dragon Restaurant in Oakland's Chinatown. The main objective of the Awards Program is to recognize exceptional projects and individuals in the field of transportation during the past year. The Awards Program directors accepted nominations using an online survey for the categories of Transportation Project of the Year and Transportation Professional of the Year. A selection committee comprised of ten transportation professionals representing the public and private sector evaluated the nominated projects on the basis of innovation, challenges faced, cost effectiveness, and public acceptance.

Award co-chair Amit Kothari presented the Project of the Year award to California Department of Transportation (Caltrans) District 4 for developing and implementing an integrated corridor Transportation Management Plan (TMP) that was facilitated by Caltrans' Emergency Operations Center and was a key part of the multi-modal, multi-jurisdictional response to the MacArthur Maze Meltdown (I-80/I-580/I-880 interchange in Oakland) last May. During the emergency Maze reconstruction, the TMP prevented the traffic congestion that had been expected after the disaster, benefiting thousands of Bay Area residents and visitors while providing major time and cost savings throughout the region. SFITE / SBTOA also honored the many other agencies involved in the Maze response with

special commendations, including the California Highway Patrol, the Metropolitan Transportation Commission, the Bay Area Rapid Transit District, and the Cities of Oakland, San Francisco, Emeryville, and Berkeley.

Sean Nozzari, Deputy District Director of Traffic Operations at District 4, and Barry Loo, Office Chief of Traffic Management at District 4, accepted the Project of the Year award and conducted a brief presentation detailing the traffic management and interagency coordination efforts during the MacArthur Maze reconstruction. Among its efforts, Caltrans activated 19 variable message signs and five highway advisory radios to keep motorists continuously informed during Maze detours. This kept traffic flowing until the Westbound I-80 to Southbound I-880 connector reopened in eight days, and the Eastbound I-80 to Westbound I-580 connector reopened in 26 days.

SFITE / SBTOA also awarded a special commendation to the City of Lafayette for its Bicycle Master Plan. Leah Greenblatt of the City of Lafayette accepted the award. The project was nominated for Project of the Year for its innovative approach towards promoting bicycle usage in a fiscally challenged and roadway capacity constrained environment.

Finally, award co-chair Shruti Malik presented the Professional of the Year Award to Ricardo Olea of the San Francisco Municipal Transportation Agency's Department of Parking and Traffic (DPT). In 13 years with DPT, Mr. Olea has distinguished himself as a leader and mentor for transportation engineers throughout DPT and also as an expert in the California Manual on Uniform Traffic Control Devices. During the past decade, his analysis of San Francisco's high accident locations has led to an annual decrease in reported pedestrian and injury collisions, amounting to an approximately 30 percent decrease overall during that period. He has also reengineered detour routes for the Central Freeway and completed one of the first City road diet projects on Arguello Avenue, which included the addition of bicycle lanes. Congratulations to Ricardo Olea on this distinguished award!



Andrew Kluter,
Co-Scribe



Allen Huang,
Co-Scribe

POSITIONS AVAILABLE



TRAFFIC ENGINEER Seattle, WA

IBI Group is a multi-disciplinary, international consulting firm offering services in four areas of practice: Transportation, Urban Land, Facilities, and Systems. Our Seattle office is currently involved in state and local jurisdiction design projects, including signals, Intelligent Transportation Systems (ITS), and electronic toll collection.

We are seeking a traffic engineer with three to ten years of experience. Areas of experience should include developing construction documents for traffic signal, intersection improvements, and ITS projects. A Bachelor's or Master's degree in Engineering is required. Eligibility for registration as PE or PTOE is desirable.

To learn more about the firm, consult our website at www.ibigroup.com. For consideration, please e-mail a resume to receptionist@ibigroup.com. EOE.

SENIOR TRANSPORTATION PROJECT MANAGER

CH2M HILL has a great opportunity for a **Transportation Project Manager** in our Reno, NV office with full relocation benefits!

This Project Manager will manage small to large size projects for the Nevada Department of Transportation and Regional Transportation Commission of Washoe County. The Project Manager is the leader/manager of project teams and is supported by technical task leaders as needed. Specific duties include planning, staffing, scheduling, budget management, quality control, safety, and coordination of subcontractors and internal technical and support staff.

To apply, indicate job code 21311BR in the subject line of your email and submit your resume to careers@ch2m.com. Visit our web site at ch2mhill.jobs. EEO/AA employer.

PE and BS degree in an engineering discipline and a minimum of 9 years of experience in roadway, highway, or bridge design required. MS degree in an engineering discipline preferred. Our top candidate is fully familiar with NDOT and AASHTO highway design standards and is knowledgeable of state-of-the-art highway design technologies.

CRAIN & ASSOCIATES

Crain & Associates, a West Los Angeles-based transportation planning and traffic engineering consulting firm, is seeking a *mid-level Transportation Planner/Engineer II* with 3 or more years of work experience, and an *entry-level Transportation Planner/Engineer I* to prepare and participate in traffic impact analysis of development projects.

Responsibilities include preparation of studies in traffic engineering, corridor analysis, impact assessment, and travel demand analysis. An understanding of the principles, theory and practice of transportation planning is required.

Knowledge of traffic capacity software, traffic analytical tools, traffic signals, travel demand modeling, and traffic simulation are also important. Requirements for both positions: Bachelor's and/or Master's in Urban Planning, civil engineering, urban geography or related field, and good writing skills. For the mid-level position, certification as AICP, PTOE, or Professional Transportation Planner or license as Professional Engineer is desirable. Please e-mail a resume and cover letter to Walter Okitsu at employment@crainandassociates.com with "Transportation Planner/Engineer I" (or "II") in the subject line. Crain & Associates is an equal opportunity/affirmative action employer.

CITY OF VICTORVILLE TRAFFIC ENGINEER

\$88,464 - \$107,784

Victorville (103,279), a rapidly growing dynamic force in the State of California, is seeking applicants with a desire to work in an organization that takes a cutting-edge approach to contemporary issues.

The Traffic Engineer supervises a staff of 14 in the traffic division of the Engineering Department; oversees signal project inspections and traffic control devices; prepares comprehensive traffic reports; recommends conditions for traffic mitigation to the Planning Commission; prepares and presents reports and recommendations to the Traffic Advisory Commission; collects, tabulates and analyzes traffic information; assists in regional transportation planning; and works with citizens, school groups, public officials and civic organizations regarding traffic concerns. Requires a Bachelor's degree in Civil, Traffic, or Transportation Engineering, including courses in

transportation and traffic engineering. Must possess registration as a Civil Engineer or Traffic Engineer in the State of California and six years of responsible office and field experience in traffic and transportation engineering.

Original application must be received by 12 noon on February 29, 2008. To request an application, please call the City of Victorville, Human Resources Department, at (760) 955-5051, or email sbarreau@ci.victorville.ca.us, City Hall, 14343 Civic Drive, Victorville, CA 92392. For more information, visit our website at www.ci.victorville.ca.us.

CIVIL/TRAFFIC ENGINEER FORENSIC ANALYSIS

Position: Civil/Transportation Engineer to analyze cases related to design, construction, maintenance and use of roads. Position is based in Orange County, CA.

Corporate Summary: MEA Forensic is a multi-disciplinary forensic investigation firm that annually investigates more than 2,000 transportation crashes, injuries, product failures and property losses for clients in the legal and insurance industries. We help clients understand the scientific aspects of their case and provide technical opinions that stand up in a court of law. See www.meaforensic.com for more information.

Qualifications:

- 7+ years engineering experience in road design and a working knowledge of Caltrans/AAHSTO standards
- Bachelor's or Master's degree in Civil Engineering or equivalent
- a keen interest in solving problems
- strong oral and written English language skills
- ability to clearly and concisely explain complex issues
- high ethical and technical standards

The successful candidate will obtain their PE designation in California when eligible. Individuals with less work experience but outstanding academic performance will also be considered.

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