

## PRESIDENT'S MESSAGE

When you think about "ITE", what's the first thing that comes to mind? For many, the oft-used publications, such as *Trip Generation*, *Parking Generation*, or the *Traffic Engineering Handbook*, are immediately



Dalene Whitlock,  
President

conjured. These reference materials (and many others) published by ITE have made all of our jobs so much easier; it's hard to imagine how we would do our work without these useful tools.

For others, the certification programs offered by ITE, including the PTOE (Professional Traffic Operations Engineer) and now the Traffic Signal Operations Specialist (TSOS) and Traffic Operations Practitioner Specialist (TOPS), are of central interest. These programs have allowed professionals in various traffic engineering specialties to gain accreditation certifying their knowledge and expertise, thereby establishing a level of trust by anyone wishing to engage their services.

For me, what ITE really means is all bound up in the people I've met and the friends I've made, and if I had to assign a single word that explains what ITE is to me, that word would be comradery. Call

*(Continued on page 6)*

### WHAT'S IN THIS ISSUE

A Call to Action	4
Data Collection Abstracts	5
Legislative News	7
Section & Chapter Reports	8
Positions Available	10

## DEVELOPMENT OF THE BELLEVUE REAL TIME ARTERIAL TRAFFIC FLOW MAP

The use of real time traffic flow maps is widespread for freeway application, but is rare for city streets. While many cities are able to provide camera snapshots of the traffic conditions via the internet, very few agencies in the US or internationally, offer a real time arterial traffic flow map to alleviate traffic congestion. Washington State Transportation Center (TRAC) conducted a survey in 2001 on the type of arterial traffic information motorists desire. Over 95% of respondents wanted to know the location of an incident. Almost 90% would like to see a flow map that showed current level of congestion on the city streets and over 95% would access the information via the internet.

If motorists can find out the traffic conditions on both freeways and arterials, they can make better informed decisions on trip planning and route selection, leading to reduced travel time, vehicle operating costs, fuel consumption, pollution, and stress levels.

### *Background and Obstacles*

Bellevue is the hub of the Seattle area's Eastside and is Washington's fifth

largest city with a resident population of 117,000 and a daily workforce of about 121,000. Bellevue staff has been developing a real time flow map since 2002. The goal is to provide up-to-the-minute traffic information to the public.

The City of Bellevue operates 177 signalized intersections, and 90% are connected to a central signal system developed by Computran Systems Corporation (MTCS.PC). In the past decade about 350 system detectors have been installed to collect volume and occupancy data at key locations. They are either 300 feet back from the stop bar or at the far side of the intersection. In order to provide a meaningful flow map for the entire city, Bellevue would need to find the resources to install an additional 700 detectors at a cost of about \$350,000, not including trenching, junction boxes installation and restoration.

Before an upgrade in 2005, the signal system software could only use one set of global parameters to calibrate system detectors for congestion level. Two

*(Continued on page 2)*

## INTERNATIONAL DIRECTOR'S REPORT

The International Board of Direction met August 4<sup>th</sup> & 5<sup>th</sup>, 2006, in Milwaukee, WI, prior to the ITE International Meeting & Exhibition. Attending were your three District 6 Directors (Rock Miller, Rory Grindley, and Julia Townsend), the International Directors from the nine other ITE Districts, the ITE Executive Committee, the Coordinating Council Representative, ITE staff, and guests (including International Director-Elect Randy McCourt and International Vice President-Elect Alf Guebert). The meeting was presided over by International President Rich Romer, and as the second IBOD meeting of the year (following the

spring meeting in San Antonio), the primary focus is typically on general administrative and housekeeping items – such as establishing the dues rates for the upcoming year.

This year, however, the IBOD was presented with the proposed Constitutional amendments for restructuring the membership categories,



Rory Grindley,  
International Director

*(Continued on page 7)*

## DEVELOPMENT OF THE BELLEVUE REAL TIME ARTERIAL TRAFFIC FLOW MAP

(Continued from page 1)

detectors with different placements (i.e., one is at the far side and one is at the upstream of an approach) but with identical values could represent different congestion level. The proprietary signal system also makes the interface and data transfer to the other servers very difficult. Furthermore, the signal system's graphical interface and map display is outdated and tedious to work with. As a result, most of our efforts before 2005 had been fruitless.

### Solution

In the spring of 2005, we decided to take on a different approach in developing a flow map. We used the existing advance detectors for data collection, and upgraded the signal software for better data processing and calibration. We also created a GIS map to display congestion levels. City staff completed most of the development and spent about \$30,000 for software upgrades. In the spring of 2006, the flow map was up and running for public access.

### Data Collection

We decided to use the advance detectors located about 100-140 feet from the stop bar as system detectors to measure the volume and occupancy data of an approach. Occupancy is the percent of time that a vehicle is present over the detector during a time interval. If the approach roadway has more than one lane, we would measure the combined traffic flow of that approach. At some locations with heavy turning volumes or uneven lane distribution, we would have a separate measurement for each movement. A remote communication unit in the signal cabinet transmits the raw data back to the central signal computer in the Traffic Management Center (TMC).

The conventional wisdom for not using the advance detectors as system

detectors is that they are too close to the intersection and cannot provide meaningful data. However, when comparing the occupancy data collected from the advance detectors at 130' back, to the system detectors at 300' back, it revealed a comparable trend and pattern.

After more investigations at numerous locations, we concluded that we could use the occupancy value of advance detectors to estimate the congestion level on any roadway segment approaching the signalized intersection. Since most of our signalized intersections already have advance detectors installed, without any additional capital investment and in six months, we connected more than 840 advance detectors to the system and were able to define 465 roadway segments.

### Data Processing

The signal system processes the raw data measured from the system detectors and uses a user-defined "system link" to derive a set of measures of effectiveness (MOEs) including occupancy. A system link consists of one or more system detectors and represents the traffic flow conditions along a particular approach of an intersection. This gives us a very flexible way to handle raw detector data. For instance, considering two intersections with a very short spacing between them, due to timing offset, the downstream approach could have enough traffic to fill up the spacing every cycle, but the traffic flow of the upstream approach could remain low. The high occupancy value of the downstream link does not necessarily indicate the approach traffic has reached heavy or severe congestion level. To provide better estimation of congestion level, we can define the downstream system link to include detector data from the upstream approach and then use the average value to determine the congestion level.

Our signal system uses the intersection cycle length as a time interval to process raw occupancy data. Once every cycle, always at the end of the main street green, the system gathers and reports the accumulated values. If the data was processed differently each time at random moment of a cycle, say just before or just after the green light for a particular movement, the

result could be erratic. It would be difficult to determine the "real" congestion level of that movement each time. Using the cycle length as a time interval guarantees that the update only happens after every movement has been served once. It takes into account the progression offset as well as the green split of each movement when measuring the congestion level. To reduce the impact of short-term fluctuation further, we also apply a user selected smoothing constant (SM) at each update. The effect of the SM is to apply only a fraction of the difference between the value calculated from current-cycle data and the previous-cycle smoothed values. Because of the above process, we are able to utilize advance detectors to generate reliable and consistent data.

### Data Calibration

Data calibration is a crucial step to ensure the occupancy values of each system link can reflect the congestion level on the street accurately and consistently. We defined four congestion levels, categorized each in terms of expected backups and the chances of making it through a signal cycle.

#### 1. Light Traffic

Once the traffic signal turns green, you'll quickly make it through the intersection.

#### 2. Moderate Traffic

Expect some backups approaching the intersection. Once the traffic signal turns green, you'll usually make it through the intersection.

#### 3. Heavy Traffic

Expect significant backups approaching the intersection. Once the traffic signal turns green, you'll often have to wait for the next green light before making it through the intersection.

#### 4. Severe Traffic

Expect long backups approaching the intersection. You'll have to wait for two or more green lights before making it through the intersection.

Based on the system link data, we determine the congestion level by assigning a threshold value to each level. From the field, or using the City camera system from the TMC, we matched the changing traffic conditions with the corresponding system link values and then set up a threshold table to define the four congestion levels. Factors like the number of approach lanes, lane distribution, spacing between intersections, speed, detector distance, timing and progression offset would influence the threshold values.

(Continued on page 3)

### About the Author:

Fred Liang is currently employed as Traffic Signal Operations Engineer with the City of Bellevue in Washington. He has been operating the signal system in Bellevue for over 20 years. He graduated with a Bachelor and a Master degree in civil engineering from the University of Washington. He is a professional engineer registered in the State of Washington.



Fred Liang, PE

## DEVELOPMENT OF THE BELLEVUE REAL TIME ARTERIAL TRAFFIC FLOW MAP

(Continued from page 2)

The following table shows some typical threshold values under certain situations:

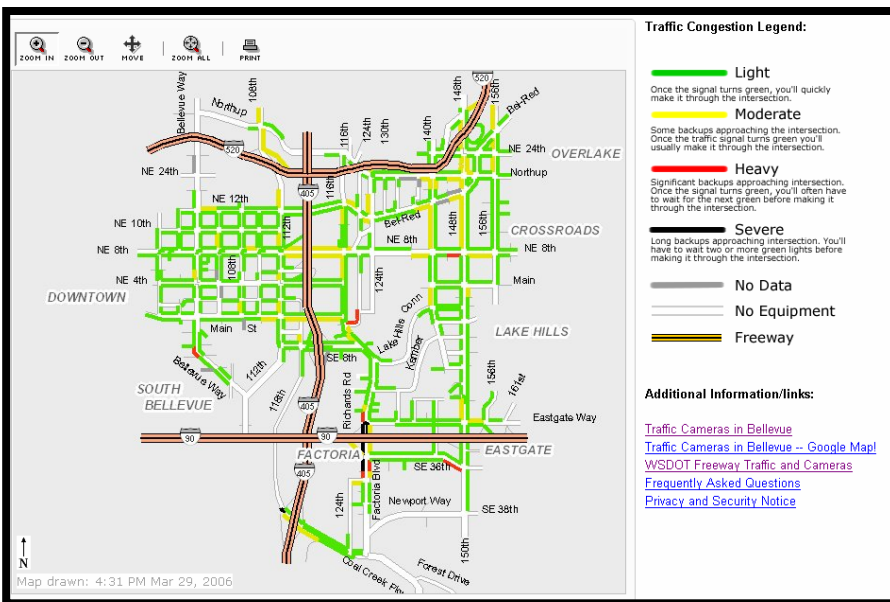
Congestion Level	Two Lanes, Detectors 125' Back	One Lane, Detector 125' Back	Two Lanes, Detectors 300' Back	Two Lanes, Detectors 50' Back	Two Lanes, One Detector
Light	< 50%	< 45%	< 45%	< 47%	< 34%
Moderate	>= 50	>= 45%	>= 45%	>= 47%	>= 34%
Heavy	>= 80%	>= 68%	>= 65%	>= 90%	>= 54%
Severe	>= 90%	>= 78%	>= 75%	>= 95%	>= 64%

Data calibration for every roadway segment is an on-going effort. Over time, higher precision can be achieved through more field observations, user feedback and continual fine-tuning.

### Data Display

Each congestion level has a designated color code associated with the threshold table. We designed a GIS map to translate the color code of each roadway segment (link) and then display the color accordingly. We selected the similar color schemes of the freeway flow map adopted by the Washington State Department of Transportation (WSDOT).

Below is a snapshot of the display at <http://trafficmap.cityofbellevue.net>



Each minute, the signal computer server compiles the color codes of all the active system links and generates a csv file (comma delimited format). Ten seconds later, the GIS application server uploads the most current csv file. The flow map will then translate the codes and display the colors when the map is first loaded or is being refreshed by a user. Every time a user will “zoom in”, “zoom out”, “zoom all” or “move” the flow map, the map refreshes with the most current imported data. If the map has already been loaded and kept running, it will refresh automatically every 60 seconds.

Because the system link data is updated once per cycle, the effective update interval of each link would be about one minute or the length of a signal cycle, whichever is greater. The typical signal cycle in Bellevue under coordination is 70-180 seconds. Essentially, we are providing users with “up to the cycle” traffic information. If the signal is running fully actuated and the cycle length happens to be less than a minute,

then we are getting “up to the minute” traffic information from the flow map.

### Conclusion

Bellevue was able to find a cost effective solution to develop an internet based real time arterial traffic flow map in less than a year. Not only does the flow map provide current traffic condition to traveling public, it also gives city staff an invaluable tool. The flow map allows us to more readily monitor overall traffic conditions. We can identify problems and congestion due to heavy traffic, incidents, constructions, equipment malfunctions, communication line failures, or other special events. This in turn will let staff make even better use of the city’s signal system that allows real-time signal adjustments. Staff can also use the city’s camera system to verify and assess congestion identified on the map.

The flow map opens up other possibilities in managing traffic. We are considering adding more features to the map in coming years that include:

- Accessing traffic camera snapshots from the map
- Incorporating the freeway flow map on the map
- Estimating congestion levels for freeway on-ramp traffic
- Displaying construction work zone and/or traffic alert information
- Allowing PDA access
- Providing traffic data such as cycle length and operation status
- Developing algorithm for congestion trends

The full text of this article can be found in the Technical Compendium from the 2006 Annual District 6 Meeting in Hawaii. It was modified to fit in this format.

Congratulations to Fred for winning the Best Paper Award at the 2006 Meeting.

## A CALL TO ACTION (TECHNICALLY SPEAKING)

ITE membership is a pretty good deal. If you're like most members, you attend a local lunch meeting or two every now and then, read (okay, skim) the ITE journal and this newsletter when you get a spare minute, and if you're lucky, wrangle a trip to some exotic fascinating place (like Portland, Oregon, the Rose City, for example) for the District 6 annual meeting, and pretty much call it good. There's some good networking and a decent presentation, paper, or article to read every now and then that makes you think about something in a new way.

We as ITE members probably don't think about it this way very often, but ITE membership is a two-way street, and your contribution to the profession should be more than just paying those dues every year. In fact, it's written right in to the ITE Canon of Ethics ([www.ite.org/aboutite/Ethics.pdf](http://www.ite.org/aboutite/Ethics.pdf)). Section 20 reads,

*"The member will cooperate in advancing the profession by interchanging information with other professionals and students, and by contributing to public communication media, and to the effects of professional and scientific societies and schools."*

I continue to be amazed at (and inspired by) the outstanding quality of transportation students and professionals that ITE attracts at every level. What's also amazing, but less inspiring, is how reluctant even the best and brightest among us can be to take just a few extra hours a year to share from their tremendous body of experience and give back to the profession in a technically meaningful way. It's pretty easy to think of what you do as pretty ordinary, but remember this: it probably only seems ordinary to you because you're the one who knows your own experiences best. I'd bet that just about everyone reading this has worked on a transportation project or program in the last year that other ITE members would find interesting, and could learn from.

If you take a minute to think of the entire body of technical and project knowledge in the collective memory of ITE's membership, it's staggering to think about how much better the profession could be if only a small fraction of that knowledge could be released and shared through ITE publications and other professional media.

Some of the benefits of contributing technical articles include enhanced professional visibility for you, positive

image/advertising for your employer, potential new work contracts or assignments, recognition as an expert in your subject, and a strong sense of satisfaction at giving something back to the rest of the profession.

So take a minute today to think about the last five projects you worked on, what went well, and what didn't, and then about the benefits outlined above of sharing your experiences with your ITE colleagues. Get together with a client, consultant, or colleague over a cup of coffee and talk about collaborating on a technical article about a project or subject you enjoyed working on, or would like to work on. That sharing is what makes our profession stronger, and makes us better transportation professionals in the process.

For more information about how you can make a positive contribution, feel free to contact me directly at 303.299.7835 or [nate\\_larson@urscorp.com](mailto:nate_larson@urscorp.com), or visit your ITE section, district or international website.



Nate Larson,  
Technical Editor

Submit articles for publication in Westernite to  
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**OFFICIAL OLD PHARTS (O.P.) GATHERING AT MARTY BOUMAN'S HOUSE. JENNY GROTE WAS INVITED TO BECOME A MEMBER, DESPITE BEING FAR TOO YOUNG.**



Standing (younger Old Pharts): Wulf Grote, Jenny Grote, Nina Parker, Harry Parker, Wes Pringle, Bill Darnell  
Sitting (older Old Pharts - except for Lu!): Yolanda Darnell, Jeanne Bouman, Marty Bouman, Lu Pringle

## DATA COLLECTION FUND PROPOSALS AWARDED

Congratulations to the University of Hawaii and Portland State University for being awarded \$1000 each for their Data Collection Fund Proposals. Portland State University will be collecting data on saturation flows at signalized intersections with high pedestrian volume. The University of Hawaii will be collecting data on saturation flow rates for signalized intersections in Hawaii. The selected proposals are published on this page.

Last year's selected Student Chapters, Portland State University and California State University Sacramento, have completed their data collection fund activities on parking generation at multiplex theaters. The reports/data are posted on [www.westernite.org](http://www.westernite.org).

The Data Collection Fund was established in 2004, to encourage Student Chapter involvement. The program is aimed at creating interest in transportation through practical activities and mentoring.

For more information regarding the Data Collection Fund please contact Karen Aspelin at 505-350-6972 or [aspelin@pbworld.com](mailto:aspelin@pbworld.com).

### CALIBRATION OF CAPACITY PARAMETERS FOR SIGNALIZED INTERSECTIONS IN HAWAII

#### *University of Hawaii Abstract*

The University of Hawaii ITE Student Chapter collected detailed field data in order to derive local base saturation flow rates and start-up lost time (SULT) for both through (TH) and exclusive left-turn (LT) movements. The data collection project investigated "touristy" vs. "non-touristy" areas on Oahu. The type of an approach was classified into Downtown, Waikiki, or Other. Both Downtown and Other are areas where the majority of drivers are local, i.e. non-tourist. Waikiki was classified as "touristy" because it is where the majority of visitors reside during their stay on Oahu.

All the data were averaged and classified by area type and movement. The main results may be summarized as follows:

- LT movements for the non-touristy area had a headway of 2.40 seconds, a saturation flow of 1594 pcphgpl, and a SULT of 2.52s.
- LT movement for the touristy area had a headway of 3.43s, a saturation flow of 1209 pcphgpl, and a SULT of 2.37s.
- TH movement for the non-touristy area had a headway of 2.39s, a saturation flow of 1591pcphgpl and a SULT of 2.31s. TH movement for the touristy area had a headway of 2.31s, a saturation flow of

1605pcphgpl and a SULT of 3.58s.

Based on the limited data collected, it is not possible to support that there is a difference in the "touristy" versus "non-touristy" areas. The data does show that in the touristy areas investigated, there were longer headways for left turn movements, but a shorter SULT for the same movements. For the through movements, it was expected for the non-touristy area to have a longer (i.e. more leisurely) headway, but instead the Downtown area measurements resulted in longer headways. Compared to the Downtown area, Waikiki had a longer SULT for the through movements.

### SATURATION FLOW RATES AT SIGNALIZED INTERSECTIONS WITH HIGH PEDESTRIAN VOLUMES

#### *Portland State University Abstract*

The ITE Student Chapter at Portland State University collected saturation flow rates at signalized intersections with high pedestrian traffic in the Portland, Oregon metropolitan area to determine the influence of pedestrians on saturation flow rates. The *Highway Capacity Manual 2000* defines the saturation flow rate to be the hourly rate per lane at which vehicles can pass through a signalized intersection per hour of green indication. The HCM currently recommends an ideal saturation flow rate of 1,900 passenger cars per lane (pcpl). Many conditions have been identified that influence this ideal rate including pedestrian activity, lane width,

transit activity, and traffic composition.

Analysis of the data reveals that pedestrians reduced the through capacity of a shared right turn lane by approximately 300 pcpl per hour of green indication. This value was measured by starting a stopwatch when the front axle of the 4<sup>th</sup> vehicle in the queue crossed the stop-bar and stopping a stopwatch when the front axle of the last vehicle in the queue crossed the stop-bar. Saturation flow rate measurements were only taken when one of the observed vehicles was required to yield to a crossing pedestrian. Additionally, it was found that pedestrians generally only affected the first three vehicles in the queue. The average flow rate for the first three vehicles beginning at the start of green

was measured to be 953 pcpl per hour of green indication.

The results of this data collection did not capture the findings that were anticipated. Due to lack of measurements, the influence of pedestrian activity on saturation flow rates was not estimated. It is concluded that additional research and data collection should take place to estimate the true impacts of pedestrians on saturation flow rates and in particular, intersection capacity. Finally, it was found pedestrian influence on start up times should also have been measured.

## PRESIDENT'S MESSAGE

*(Continued from page 1)*

me crazy, but I think that being a member of ITE, and particularly an officer, is just a whole lot of fun because of all the wonderful people I get to meet and spend time with.

That's not to say that it isn't a lot of work, because it is. Those of us on the Board communicate regularly to resolve a myriad of small issues, work with the various Committee Chairs to keep activities moving forward between semi-annual meetings, answer questions that come from Section and Chapter officers, and provide information to our members. But the reward of all that hard work is the chance to socialize and enjoy the company of other members – peers,

sometimes competitors, but ultimately, friends.

I had the privilege of representing District 6 at the International Meeting in Milwaukee, where following Monday's information-packed sessions, District 6 members and their guests dropped by my room to chat for awhile, catch up with old friends, and even make some new ones. It was a great opportunity to see people that I might have missed otherwise. The Tuesday night Banquet was topped off by a great band and a lot of dancing – when the floor filled during the very first song the band had to confirm with us that we were indeed a bunch of engineers! It was a great evening of

socializing with members from around the world, and a terrific opportunity to meet members from outside our Western District.

And this is just the start. During the next ten months I hope to have an opportunity to visit many of the Sections and Chapters to hear about what you're doing, but more importantly, to find out what ITE can do for you. Our members have an amazing amount of combined knowledge and experience; and for the most part, all you need to do is ask to tap into it!

I thank you for this chance to serve as your President, and hope that you will take me up on my offer to do what I can to make your ITE experience the best it can be.



### Call for Abstracts

**Institute of Transportation Engineers District 6  
2007 Annual Meeting  
Portland, Oregon  
July 15-18, 2007**

**“Prepare. Evaluate. Innovate. Sustain.”**

**Get Ready for Portland 2007!!**

**\*\*Combined District 6 and Quad Conference\*\***

The Local Arrangements Committee (LAC) for the 2007 ITE District 6 Annual Meeting is pleased to make this preliminary announcement for accepting abstracts for presentations and proposals for special sessions for consideration in the Technical Program. Abstracts will be welcome on any of the following transportation topic areas:

- Traffic Engineering • Transportation Planning
- Traffic Operations & Management • Commercial Transport Issues
- Traffic Safety • ITS Applications/Research
- Advanced Vehicles/Emissions • Travel Models and Micro-Simulation Reductions Strategies
- Pedestrian or Bicycle Planning/Design • Transit Planning, Design or Operations
- Livability/Community Issues • Leadership and Education

Authors should not feel constrained by this list of topics. The LAC for the 2007 Annual Meeting wants the best, most interesting and compelling presentations, and we will work to include any quality presentation in the Technical Program. If you have a presentation that falls outside the topics on the attached list, submit the abstract with your own topic suggestions. The final technical program will be determined when all abstracts have been reviewed by the Technical Committee. Abstract submittal will be electronic and is limited to 250 words.

**Abstracts will be due December 15, 2006**

More information to follow on [www.westernite.org](http://www.westernite.org) and [www.oregonite.org](http://www.oregonite.org)

## LEGISLATIVE NEWS

As this is written Congress will soon recess until after the November elections, but there has been recent activity in both the House and Senate on FY07 Appropriations bills. The Senate Committee bill (HR5576) funds transportation programs slightly above FY06 levels, and an earlier House version does the same, although there is some doubt about funding levels for future Small Starts transit programs. Given the upcoming recess, a Continuing Resolution appears likely until sometime in November at a minimum. The House and Senate also acted in Committee to

increase transportation security funding over a period of up to three years.

In California the run-up to the November elections is starting with transportation interests focused on Proposition 1-B, which would provide significant bond funding to many projects, although the actual project lists would be decided locally, with the voters seeing generalized categories of project types on the ballot. Another unusual issue being handled via SB 1726 are objections by the California Highway Patrol to some transit vehicle headsign displays and colors, which is

being addressed by a working group of law enforcement and transit interests. SB 372 concerning the limits of use by agencies of design-build contracts is also under current debate.



Walt Stringer,  
Legislative Chair

## INTERNATIONAL DIRECTOR'S REPORT

(Continued from page 1)

meaning a significant amount of discussion ensued to ensure that adequate notice of the amendment ballot would be given to the membership, as the election would be conducted almost entirely by email notification and online voting. Several IBOD members, including your District 6 International Directors, also wanted to be sure that full disclosure would be available to show members how the amendments would affect their dues. This required the IBOD approve two sets of dues tables: the first assuming no changes to the membership categories; and, the second assuming all of the amendments would be adopted. In both cases, the changes to the dues rates were primarily centered on adjustments between the various membership classes, rather than adding an across the board inflationary increase. Further, should the Associate Member class be eliminated through passage of the respective Constitutional Amendment, it was recognized that there should be a period of transition into the higher dues rates the existing Associate Members, so that they aren't faced with a significant cost increase all at once. Likewise, for Student Members that would now be transferring directly into the Member class, a multi-year step increase in dues is provided.

By press time, the outcome of the Constitutional Amendment election will be known. Your District 6 International Directors certainly hope you took the opportunity to cast your ballots (both for the International Officer election in July, and the Constitutional Amendments in August), and were able to do so as an informed voter. This year's on-line International Officer election had a record number of ballots received (over 4,000 ballots), meaning almost 35% of the eligible voting members responded. This is

great news, meaning that the on-line voting process continues to be a success in increasing voter turn-out. And based on member's voiced concerns, next year's officer election will include more efforts for improving the security of voter credentials and passwords. We would continue to welcome any feedback or comments that you may have on how to improve the process for future elections!

The first exams for the new Traffic Operations Practitioner Specialist (TOPS) and Traffic Signal Operations Specialist (TSOS) certification programs were held in Milwaukee. Go to <http://www.ite.org/certification/examschedule.asp> for upcoming exam sites and dates for these and PTOE certification opportunities. The IBOD approved a grant to the ITE Educational Foundation to develop a training program for a Professional Transportation Planner (PTP) certification, with the inaugural examination expected sometime late in 2007.

A mid-year recap of the Institute's finances shows very strong revenue gains in the Continuing Education programs, as well as in ITE Journal Advertising, but lower than expected revenue in publication sales. Nevertheless, the overall budgeted net loss for the year of roughly \$200,000 has now turned into a projected gain of over \$300,000. This projected gain aside, the IBOD approved up to a 5% inflationary increase in the registration fees for the 2007 Annual Meeting and Spring Technical Conferences (with Rock, Rory, and Julia being the sole dissenters). The Annual Meeting will be held August 5-8 in Pittsburgh, while the Spring Conference will be held March 25-28 at the Sheraton San Diego Hotel and Marina.

The IBOD voted to approve the proposed District 6 Charter revisions, which were approved by our own District

membership vote in June, so now the changes become official.

Other highlights and actions of the IBOD included approving an increase in the allowable expense reimbursements of the International Vice President candidates to help defray the increasing costs associated with campaigning for this important position, and to add the subject area of maintenance of traffic control devices as an issue topic for the IBOD. This further includes that ITE be an advocate for continuing human factors research towards visibility requirements of traffic control devices. Also, based on concerns expressed by District 6 members, the IBOD directed that the issues associated with aging LED traffic signal indications (such as partial burnouts or diminishing light output) be identified by relevant Council committees.

The upcoming fall IBOD meeting will be held the last weekend of October in Washington, D.C. The agenda includes discussion of the international aspects of the Institute, which will help set the course for future levels of investment of ITE into services towards our international members. This will be the last IBOD meeting for Tim Harpst, as the outgoing Past International President, and for Rock Miller as a District 6 International Director; we'll miss their wisdom, guidance, patience, and thoughtful insight next year.

Remember that your International Directors are here to represent you. So please let any of us (Rock, Rory, and Julia) know of any specific issues or items you feel require the IBOD's attention. We're also available to travel to your local Section and Chapter meeting to meet firsthand with our members.

## SECTION AND CHAPTER ACTIVITIES



### NEW MEXICO SECTION

*April 6, 2006*

Location: El Pinto Restaurant, Albuquerque, NM  
Attendance: 30

Announcements: Parker Bell recommended that the NM Section proceed to have our designated change in the NM traffic code related to unsignalized T intersections traffic control reviewed by the Governor's legal task force to see if they would sponsor it for recommended introductions and passage as a bill in the 2007 NM Legislature. The chair of eth ad-hoc committee working on this is Nevin Harwick. He will be asked to respond to this recommendation.

Program: the City of Albuquerque Mid-Block Enhanced Bicycle - Pedestrian Crossing Safety Improvement Project.

The goal of the project was to develop a prototype or standard for an enhanced crossing on a bikeway trail where it crosses an arterial. However, the findings during the project development process were that the site specific criteria generally controls the type of design.

Questions: Operationally will the City of Albuquerque operate flashers only on the pedestrian/bike intersection or will it conflict with other locations where there is continuous flashing? For actuated flashing options, how long would it last before shutting off? Bicyclists, pedestrians, and handicapped pedestrians all have different street crossing speeds.

No crosswalk markings were recommended during the design process.

The revise project cost to construct it is \$425,000

*May 4, 2006*

Location: El Pinto Restaurant, Albuquerque, NM  
Attendance: 29

Announcements: 2006 Annual Transportation Engineering Conference – Steve Eagan announced highlights form this NMDOT sponsored conference held April 26-28, 2006 at the Hilton Hotel in Las Cruces, NM.

ITE HQ Web Based Ethics Class –

Afshin Jian announced the successful participation by many NM Section members by remote site that was held on April 18, 2006 for 1.5 hours. ITE-HQ was told to expand future versions of the class to 2.0 hours, as that is the new minimum biennial requirement in New Mexico and other states for professional development for registered profession engineers to maintain their PE licensure.

Program: UNM Civil Engineering Student Paper Winners: Kristen Weber (First Place, \$100)

Paper Title – “Alternate treatment for Montano Bridge, Albuquerque”. The paper makes the following suggestion as an Alternate treatment for Montano Bridge, Albuquerque, to improve capacity. Maintain four lanes but narrow them to ten feet, three inches in width and then eliminate one of the two bike lanes and narrow the second bike lane to generate enough width to establish a fifth travel lane to be used as a reversible lane, depending on peak flow direction.

Jose Silva – (Second Place, \$50). Paper Title – “Alternative Improvement Treatments for area of Coors Boulevard SW, form Barcelona Road SW to Rio Bravo Boulevard SW”. Different proposed channelized intersection improvements were presented to improve capacity and safety of traffic operations at the various intersections along this segment of Coors Boulevard SW in Albuquerque plus access and egress driveways at the proposed Rio Bravo Square Shopping Center at Coors and Rio Bravo.

*June 1, 2006*

Location: El Pinto Restaurant, Albuquerque, NM  
Attendance: 28

Announcements: Next ITE NM Section Meeting: President Tom Blaine said that it was undecided about a date, place or topic for our next meeting in July. If nothing is determined, we may not have a meeting in July. Traditionally in July the ITE NM Section tries to make the meeting part of a field trip.

Program: Steve Krest, City of Farmington, “Small City Traffic Engineering”. This presentation is a preview of a more elaborate one scheduled for presentation at the 2006 ITE District Six Meeting in Honolulu, Hawaii.

The City of Farmington, NM is responsible for street lighting as well as street pavements, bikeways, and all roadside signals.

They use line of sight radio

communication system for the traffic signal network. The City of Farmington also provides technical support for the smaller cities in its metropolitan area, Aztec and Bloomfield.

Farmington uses passive detector with a microwave field for pedestrian detection at selected marked crosswalks.

*August 3, 2006*

Location: Alvarado Transportation Center, Albuquerque, NM  
Attendance: 31

Program: Annual Field Trip Meeting – “RailRunner Rail Transit Ride”

This meeting was designated as the annual field trip meeting for the New Mexico Section. The trip this year was for the Section attendees to gather at the intermodal transit center in Downtown Albuquerque, located at First Street SW, beginning at 11AM, pick up a box lunch, and then join the general public on a free ride on the newly started Railrunner regional rail transit line from Albuquerque north 18 miles to the US 550 Sandoval County Station in North Bernalillo. Then after a fifteen minute layover, they would ride the train back south to Downtown Albuquerque, arriving at 12:30 PM.

This trip occurred as planned. After returning from the two-way train ride, a member of the Railrunner Train staff from the Mid-Region Council of Governments briefed some of the Section members on the operational details of the Railrunner rail transit system. The system is scheduled to begin charging fares beginning in mid October 2006 and make five runs each weekday between Albuquerque and Bernalillo. Some time in 2007 it will expand southward from Albuquerque for an additional 35 miles to reach the town of Belen. Various bus transit or other feeder transit systems to connect with the Railrunner system are either undetermined or still in the planning stages.

*Steve Eagan,  
Secretary-Treasurer*





## ATTENTION SECTION SCRIBES AND SECRETARIES!

Did you notice that the Section and Chapter Activities was suffering from a lack of diversity? You can submit your section and activities reports to [westernite@cox.net](mailto:westernite@cox.net) at any time and they'll be printed in the next newsletter. Everyone wants to know what is going on in your part of District 6. This is another way of drawing our membership closer.

## DISTRICT 6 NOMINATIONS

District 6 is seeking nominations from those individuals who would like to further serve ITE as the District's next Secretary - Treasurer or as our future International Director. Nominations for Secretary- Treasure for 2007-2008 will be accepted from individuals living outside of California, while our next International Director will be selected from an individual from California. Anyone interested in learning more about the nomination process or have a name to submit should contact District 6 Past President Ken Ackeret at (702) 862 - 3601 or e-mail at [ken.ackeret@kimley-horn.com](mailto:ken.ackeret@kimley-horn.com).

## ALL ABOARD THE SKI TRAIN!



The Colorado-Wyoming Section invites you and your family to join us on Saturday, January 27<sup>th</sup>, 2007 for our 5<sup>th</sup> 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](mailto:ericboivin@alltrafficdata.net). For more information about the Ski Train, visit [www.skitrain.com](http://www.skitrain.com) or call 303.296.4754. Learn more about Winter Park (not just for skiers) at [www.skiwinterpark.com](http://www.skiwinterpark.com). Space is limited, so call today, and we'll see you on the Ski Train!

## Opportunities

- Highway Engineer/Project Manager
- Street Engineer/Project Manager
- Municipal Streets Team Lead
- Graduate Engineers
  - Drainage
  - Structural
  - Highway
- Internships Available



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## POSITIONS AVAILABLE



### SIGNAL SYSTEMS ANALYST

The City of Chandler, Arizona (pop. 242,000), a diverse and growing community in the southeast valley of the Phoenix metropolitan area, is seeking a Signal Systems Analyst. This position requires four years experience in the practice of traffic engineering, ITS operations and planning, computerized traffic signal systems, responsive and adaptive traffic signal timing, and traveler information systems; experience in ITS technologies and applications such as network telecommunications, traffic signal controllers, and video detection equipment is desirable. Graduation from a recognized college or university with a major in Traffic, Transportation, Civil, Computer or Electrical Engineering is also preferred; a valid Arizona driver's license. Open until filled.

To apply:

Apply on line at [www.chandleraz.gov](http://www.chandleraz.gov)  
job hot line (480) 782-2354  
toll free 1-888-350-3013  
55 N. Arizona Place, Suite 204  
Chandler AZ 85225  
[jobs@chandleraz.gov](mailto:jobs@chandleraz.gov)



Have you ever dreamed of living in Montana while working for a respected and nationally recognized civil engineering firm?

Do you want to work on interesting projects yet have balance between your work and personal life?

If you answered yes...then Robert Peccia & Associates (RPA), an award-winning employee-owned civil engineering firm, has an exciting opportunity for you as a full-time **TRANSPORTATION ENGINEER/PLANNER**.

Our Helena and Kalispell locations offer world-class recreational opportunities with a

relaxed Western lifestyle. During the work-week, this position would be responsible for conducting transportation technical analysis, including data collection and analysis, traffic safety studies, arterial corridor improvements plans, urban transportation plans, and traffic impact studies. The ideal candidate would participate in project management and business development activities, then relax on the weekends with sport fishing, big-game hunting, alpine skiing, or simply enjoying the scenic views!

Qualified candidates will have a bachelors of science degree in civil engineering, transportation planning, or related field, with three-to-seven years of professional related experience. In addition to strong analytical and communication skills, certification as an AICP, P.T.O.E. or P.E. is highly desirable. AutoCAD/LDD and/or MicroStation /GEOPAK software experience is desirable, along with a working knowledge of HCS, SYNCHRO, CORSIM and/or VISSUM.

In business for nearly 30 years, RPA offers a competitive salary and exceptional benefits package which includes generous vacation and sick leave, paid holidays, medical and disability insurance with dental and vision, flextime, continuing education, Pension and Profit Sharing, and ESOP. Please submit a letter of interest and resume to Keith Jensen, P.E., President, P.O. Box 5653, Helena, MT 59604. Submissions can be made via our website at: [www.rpa-hln.com](http://www.rpa-hln.com).

### TRAFFIC ENGINEERING ASSOCIATE City of Camarillo, CA

Salary \$62,621 - \$84,467/annually, plus excellent benefit package, including PERS 2% at 55. Participates in traffic engineering including transportation planning, signal timing and design, prepares traffic studies. Reviews environmental assessments and environmental impact reports. Minimum qualifications include a Bachelor's degree in Traffic Engineering or a closely related field. Registration as Traffic Engineer with the State of California or certification as Professional Traffic Operations Engineer is desirable. Apply by 10/6/06. City of Camarillo, 601 Carmen Drive, Camarillo, CA. 93010, or call 805-383-5618 for City application (req'd). [www.ci.camarillo.ca.us](http://www.ci.camarillo.ca.us)

### PROJECT ENGINEER (TRAFFIC) AND ENGINEERING INTERN (TRAFFIC) ) City of Campbell, CA

City of Campbell is recruiting for Project Engineer (Traffic) and Engineering Intern (Traffic) part-time positions for the Public Works Department. Starting Wages D.O.Q.: Project Engineer (Traffic) \$20-24; Engineering Intern (Traffic) \$13. Additional information and requirements at [www.cityofcampbell.com](http://www.cityofcampbell.com). Send completed application and resumes to [publicworks@ci.campbell.ca.us](mailto:publicworks@ci.campbell.ca.us) or 70 North First Street, Campbell, CA 95008. (408) 866-2150.

### CITY TRAFFIC ENGINEER

Goodyear, Arizona  
Salary: \$73,330 - \$111,587 DOQ

The City of Goodyear is seeking a City Traffic Engineer. This position will plan, performed difficult and advanced traffic engineering work. Supervision is exercised over professional and paraprofessional personnel in planning, designing, collecting and analyzing data and information on traffic engineering projects. Where supervision is not a major element, work is characterized by the requirement for performance of very difficult and exacting assignments. Work involves the application of professional traffic engineering knowledge and skills to a variety of engineering functions. Work requires a valid driver's license, and five (5) years experience in traffic engineering or a related field. Work requires professional level of knowledge of a discipline equivalent to that which is acquired in a Masters degree-level of study, though equivalent experience may be substitute for education. Registration as a Civil Engineer and/or Professional Engineer in Arizona (PE) is required. Open until filled. For more information or to apply online visit our website at [www.goodyearaz.gov](http://www.goodyearaz.gov). EOE

### POSITIONS AVAILABLE ADS:

To place your ad, e-mail your ad to [douglas\\_smith@urscorp.com](mailto:douglas_smith@urscorp.com). The deadline is the 28th of the previous odd-numbered month. The cost is \$1.50 per word, with a minimum cost per ad of \$100.00. Ads are also posted on our web site at [www.westernite.org](http://www.westernite.org). More information is available on our Web site.

## POSITIONS AVAILABLE



Founded in 1944, RBF's reputation and success are founded on our commitment to quality, professionalism and continuing innovation in attracting many of the most important and interesting projects in Southern California. We are currently seeking a Sr. Project Manager, Project Engineer and Design Engineer in our Transportation/Public Works department in Irvine, CA to become immediately involved in a significant number of freeway, highway and aviation projects. These opportunities include major infrastructure projects such as the extension of the SR-241 toll road, several miles of major arterial highways, re-use of the Tustin Marine Base, several interchanges in the Inland Empire and Orange County as well as a variety of aviation projects as part of long term "on-call" contracts with Long Beach and Palm Springs airports.

The positions require a Bachelor's degree in Civil Engineering, a minimum of 3 years of transportation design experience, and professional registration or the ability to obtain within one year.

RBF offers an excellent compensation and benefits package including a generous matching 401(k) plan, profit sharing and bonus programs, relocation assistance and ownership opportunity. We welcome you to join our team, build your career with us and make a difference! Please visit our website [www.RBF.com](http://www.RBF.com) and send you resume to:

RBF Consulting  
14725 Alton Parkway  
Irvine, CA 92618  
Fax: (949) 855-7060  
Email: [hmail@rbf.com](mailto:hmail@rbf.com)

### PROJECT ENGINEER – TRAFFIC

The City of Beaverton, Oregon, (pop. 83,000) seeks a professional engineer with experience in municipal traffic engineering. PE license required. Preference will be given to candidates with substantial experience in the design and timing of traffic signals. Additional information available at [www.beavertonoregon.gov](http://www.beavertonoregon.gov). Beaverton is a growing urban center located immediately west of Portland, OR.

### OPPORTUNITIES TO GROW WITH CONSULTING ENGINEERING FIRM IN HELENA, MONTANA

Stahly Engineering & Associates, a well established Montana-based Consulting Engineering and Land Surveying firm with offices in Helena and Bozeman, Montana. Employees of the firm enjoy a family friendly atmosphere in cities located close to a multitude of outdoor recreational opportunities. We are currently seeking:

#### TRANSPORTATION ENGINEER:

Position located in our Helena, Montana office. Experience in roadway, highway, and bridge design. Our firm enjoys working relationships with the Montana Department of Transportation, Cities and Towns throughout the state, and County Road and Bridge Departments. Professional licensing (MT) is desirable, but not required.

Salary DOE. Generous benefit package. Please send resume to Stahly Engineering & Associates, Inc. 3530 Centennial Drive, Helena, MT 59601 or e-mail to [seaeng@MT.net](mailto:seaeng@MT.net) attn: Human Resources Manager. EEO.

### TRAFFIC ENGINEER II

Interested applicants apply at <http://www.phoenix.gov/jobs/>  
\$50,918 - \$76,045 annualized / Open on a continuous basis.

Requires one year of experience in traffic engineering plus a bachelor's degree in engineering, including courses in traffic and/or transportation engineering. Other combinations of experience and education that meet the minimum qualifications may be substituted.

Performs work involving the application of traffic engineering knowledge and skills in the planning, design and construction of transportation projects. Duties include staff support for advanced transportation planning activities, traffic operations that include neighborhood traffic management, and research of safety-related data. Duties also include site plan review of right-of-way, and transportation-related reviews of master plan documents and traffic studies. Currently there is one vacancy in the Street Transportation Department.

### TRAFFIC ENGINEER I

Interested applicants apply at <http://www.phoenix.gov/jobs/>  
\$41,829 - \$62,254 annualized / Open on a continuous basis.

Requires a bachelor's degree in civil engineering including courses in traffic engineering. Other combinations of experience and education that meet the minimum qualifications may be substituted.

Performs entry level traffic engineering work. Duties include supervising technicians, coordinating and facilitating groups for neighborhood projects and responding to the concerns of residents by written correspondence and field visits. Develops petitions, surveys and newsletters, attends and makes presentations at public meetings, and reviews traffic studies for neighborhood projects. One of the positions in the Street Transportation Department will be responsible for the coordination of the Bikeway Program and advocating for the City of Phoenix within the region. Reviews and approves traffic impact studies for development and Master Plans for large Planned Community Developments. Additional activities will include involvement with the Impact Fee Program and numerous special projects will also be required. Currently there are two vacancies in the Street Transportation Department.

### CITY OF PEORIA

Assistant City Traffic Engineer  
\$71,114 - \$90,761 Annually  
Opens: August 21, 2006  
Open Until Filled

To apply for this position visit our website at [www.peoriaaz.gov](http://www.peoriaaz.gov).

Job Hotline: (623) 773-7105  
Application Fax Line: (623) 773-7149

#### BENEFITS

- Hiring incentive (negotiable) & interview travel expense reimbursement
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- Blue Cross/Blue Shield medical plans
- Life, dental, vision, and long & short term disability plans
- City paid deferred compensation
- City matching contributions to the Arizona State Retirement System
- Ten vacation plus seven personal leave

## POSITIONS AVAILABLE

days, ten holidays, and twelve days of sick leave per year

- Generous education reimbursement program

### REQUIRED QUALIFICATIONS

Bachelor's degree from an accredited college or university with major course work in civil or traffic engineering or related field, and three years of professional and technical traffic engineering experience.

Possession of a Certificate of Registration as a professional civil engineer in the State of Arizona. An Arizona Drivers license and ability to maintain insurability under the City Vehicle Insurance Program.

### DESIRED QUALIFICATIONS

Experience interacting with the public, elected officials, private consultants and other government agency staff. Extensive knowledge of traffic engineering and transportation planning principles; techniques of management and supervision, including goals and objectives development and work planning organization; principles and practices of contract administration and project management; budget development and administration; grant funding application and administration.

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#### **HDR, INC.**

Senior Traffic Project Manager  
Bellevue, WA

HDR is an architectural, engineering, planning and consulting firm that excels at complex projects and solving challenges for clients.

Responsible for management of Traffic Projects, teams within the Traffic Department, and business development/client relationships. May be viewed as a technical expert with recognized authority in an area of specialization that resolves problems of greater scope and complexity. May plan and develop projects/design activities; plan, organize, and supervise work of medium to large staff; serve as

project manager on larger projects, but project management is not sole focus of position.

Experience:

- 15 years of Traffic/Transportation experience
- Degree in Engineering
- Professional engineering registration required
- Must have a well-developed project background in Traffic Analysis, Traffic Program Management, and/or management of a traffic group
- Puget Sound business experience preferred

Apply Online:

<http://www.gojobs.com/seeker/aoframeset.asp?>

[JobNum=570442&JBID=1454](http://www.gojobs.com/seeker/aoframeset.asp?JobNum=570442&JBID=1454)

Employer JobCode: 060607



#### **CIVIL ENGINEER** Lancaster, CA

Parsons Brinckerhoff, one of the oldest employee-owned consulting firms in the US, is seeking a Civil Engineer with project management experience for project for the City of Lancaster, CA. The position is to manage the work of other consultants performing such tasks as street widening, sidewalks over existing freeways, and street rejuvenation. It requires at least eight years relevant experience and a BS degree in Civil Engineering, and the ability to develop and maintain client relationships, and strong interpersonal and communication skills. Skills with MicroStation and InRoads, and a California PE are preferred. The position has an initial assignment of up to one year.

Call Toby Duffell, Corporate Staffing Manager, for an immediate interview on 917-975-7621, any day, or send Toby an e-mail at: [careers@pbworld.com](mailto:careers@pbworld.com)

*Parsons Brinckerhoff is an Equal Opportunity Employer, m/f/d/v.*

#### **TRAFFIC ENGINEER** Lancaster, CA

Parsons Brinckerhoff, one of the oldest employee-owned consulting firms in the US, is seeking a Traffic Signal Design

Engineer with project management experience for project for the City of Lancaster, CA. The position is to manage the work of other consultants performing such tasks as signal design at city intersections, signal synchronization, and crosswalks. It requires at least eight years relevant experience and a BS degree in Civil or Electrical Engineering, the ability to develop and maintain client relationships, and strong interpersonal and communication skills. A California PE is preferred. The position has an initial assignment of up to one year.

Call Toby Duffell, Corporate Staffing Manager, for an immediate interview on 917-975-7621, any day, or send Toby an e-mail at: [careers@pbworld.com](mailto:careers@pbworld.com)

*Parsons Brinckerhoff is an Equal Opportunity Employer, m/f/d/v.*

#### **CIVIL ENGINEERS** (2 positions)

*\$4,768 - \$5,797/month plus full benefits including PERS.*

This position is represented by the Oregon Public Employees Union.

#### **Civil Engineer—Transportation Civil Engineer—Land Development**

Open until filled; first review is October 2, 2006; may close after this date without prior notice.

Both Civil Engineer positions will function in a team of engineers who have similar duties and responsibilities. The teams are responsible for the full scope of duties as listed in the full job description; allocation of the duties will vary based upon a team member's abilities and interests. Each team member will be responsible for a portion of the essential job duties.

#### **Civil Engineer--Transportation**

**Position Overview:** The Civil Engineer (Transportation) participates in and leads largescale transportation planning projects affecting Springfield. This work typically involves multi-agency project teams, consultant project teams, and internal design and review groups.

#### **Civil Engineer--Land Development**

**Position Overview:** The Civil Engineer (Land Development) participates on public works improvement projects including the planning, design and construction of Public Works improvement projects such as streets, sanitary sewers and storm sewers.

## POSITIONS AVAILABLE

### Education & Experience:

Completion, or equivalent, of a job-related four year college degree program in civil engineering or transportation engineering, plus four years of professional experience in civil engineering, transportation engineering or transportation planning. Registration as a Professional Civil or Traffic Engineer in the State of Oregon, or ability to obtain the registration through reciprocity or comity within twelve (12) months of appointment. Four years of professional experience is preferred. A Masters Degree in a related field may be substituted for one year of the required experience. An Oregon driver's license is required at the time of appointment.

A full job description and applications for these positions are available on-line at [www.ci.springfield.or.us](http://www.ci.springfield.or.us). Applications will be accepted until the positions are filled.

This announcement is intended as a general descriptive recruitment guide and is subject to change. It does not constitute either an expressed or implied contract. EOE/AA Employer

Sharing and Savings Plan (with 401k and company match). Visit our web site for additional information about these and other exciting employment opportunities ([www.lsa-assoc.com](http://www.lsa-assoc.com)). LSA is an EOE/AA.

Please send resume to:

LSA Associates, Inc.

Heritage Plaza

901 E. Tahquitz Canyon Way, Suite B-200

Palm Springs, CA 92262

Or e-mail [paul.pope@lsa-assoc.com](mailto:paul.pope@lsa-assoc.com)

### SR. CIVIL ENGINEER (TRANSPORTATION)

Fontana, CA

One of the fastest growing cities in the Inland Empire is seeking a candidate that will be responsible for planning, coordinating and participating in the activities of a major section of our Redevelopment/Special Projects Dept. Responsibility includes all phases of Project Development and Project Mgmt. of major freeway interchange and grade-

separation projects. This position also requires extensive coordination with CALTRANS, SANDBAG, FHWA, SCAG, County of San Bernardino and other public agencies. Must have at least a Bachelor's Degree in civil/transportation engineering, possess a CA PE Certification, and have at least four years of progressively responsible experience as a Civil or Transportation Engineer along with a valid Class "C" CA Driver's License. Apply, HR, 17005 Upland Ave., Fontana, CA 92335 (909) 350-7650 or visit our web site at [www.fontana.org](http://www.fontana.org). This position closes on October 19, 2006 at 4:30 p.m. Salary Range: \$6377 - \$7752/mo. + benefits.

Any questions regarding this advertisement should be directed to:

Terri Truitt

Human Resources Analyst

(909) 350-6737

[ttruitt@fontana.org](mailto:ttruitt@fontana.org)

### SENIOR TRANSPORTATION PLANNER

LSA is seeking an individual to establish the Transportation Planning/Engineering function in our Palm Spring office. Typical responsibilities include project management of traffic impact analyses for public and private development projects, operational analyses for roadway improvement projects, General Plan and Specific Plan circulation studies, and business development. Applicants for the position should have 8-10 years of direct experience. Master's or other advanced degree in transportation planning, traffic engineering, urban planning, or a related field is desirable. Excellent writing and Excel skills required.

At LSA Associates, Inc., our greatest asset is our employee ownership. We take great pride in our work, and we provide an environment in which each person can grow professionally. We are always looking for talented, dedicated professionals to join our team. We offer excellent compensation and benefits, including competitive pay; medical, dental, vision, group life, and long-term disability insurance plans; vacation, sick, and holiday pay, an Employee Stock Ownership Plan (ESOP); and a Profit

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## POSITIONS AVAILABLE

### Parametrix

#### LEAD TRANSPORTATION PLANNER / ENGINEER (#SEA601)

This is a critical multi-firm team leader/manager with direct accountability to the Parametrix SR 520 Bridge Replacement and HOV Project Manager in the multi-firm project office in Seattle, WA. The Transportation Planning/Operations Manager is responsible for: work planning; scope development, budget estimating, and negotiations; staff assignments, work execution, on-time delivery; intra- and inter- project team coordination; quality control and quality assurance; developing/leading community, jurisdiction, and agency briefings. Seeking someone with 10+ years experience with both planning and design. Technical skills should include: travel demand forecasting (EMME/2 experience not necessary); freeway operations and simulation (CORSIM, VISSIM experience desired); local street/intersection operations (Synchro and CORSIM); an understanding of transit planning local intersection and freeway design background; and excellent verbal and written communication skills.

We have an employee ownership culture where we seek and value the ideas of employees and challenge each other to reach our greatest potential. Parametrix offers an exceptional benefits package, exciting project work and a corporate commitment to work/life balance. Please submit a letter of interest and resume through our website.

[www.parametrix.com](http://www.parametrix.com)

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Did you know that The Transpo Group was voted by Washington CEO as one of the best companies to

work for in 2004 and 2006?

Our company is a mix of youth and experience, cutting edge technology, teamwork, fun and a commitment to doing great work with excellence in client service. We have provided traffic engineering and

transportation planning services to public and private sector clients in the Northwest region since 1975. We strive for excellence in what we do and embrace those with the same desire. The Transpo Group has professional civil engineering registration and clients in the States of WA, OR, CA, ID, WI, MT, CO. Our projects include traffic engineering design, operations analysis, microsimulation, traffic impact studies, long-range multi-modal plans, transportation financing, non-motorized planning and design, HOV planning and TDM program development.

We successful and growing! Currently we are seeking talented professionals for the following positions:

#### Practice Lead – Roseville, California

Position Responsibilities:

- Business Development
- Responsible for revenue, utilization and office profitability
- Manage office operations including staffing, quality assurance, and client relations
- Oversee and coordinate delivery of traffic analysis, planning, and engineering design services in the state of California

Required Qualifications:

- Degree in Civil Engineering/Transportation Engineering.
- PE License
- 9 – 12+ yrs of relevant experience, with at least 5 years in an external consulting capacity.
- Proven business development and branding skills
- Successful management experience
- Superior leadership and mentoring expertise

Preferred Qualifications:

- Private Sector traffic services in support of development and infrastructure preferred
- Public sector experience in traffic services, ITS and transportation planning desirable
- Experience working with California jurisdictions
- Established network of contacts within regional and statewide agencies
- General management experience with a start up office a plus

#### Sr. Transportation Engineer, Kirkland WA

Position Responsibilities may include one or more of the following:

- Evaluation of traffic signals, corridors, as-builts, and complex transportation systems.
- Design of channelization/stripping.
- Design of signal and illumination systems including electrical design.
- Development and implementation of neighborhood plans, and traffic calming measures including roundabouts.
- Planning, designing, development and operation of advanced traffic signal control, traveler information systems, traffic data collection and communications systems, and advanced public transportation and traffic management center systems.
- Performing traffic studies and comprehensive transportation planning studies

Required Qualifications

- Degree in Civil Engineering/Transportation Engineering
- Active PE license for 5+ years, ability to register in WA
- 7-10+ years transportation engineering experience, preferably consulting to public and private clients
- Excellent project management and client relations skills
- Proven success in business development
- Effective mentoring and team leadership skills

Preferred Qualifications

- Strong marketing and branding skills
- Experience working with a variety of State and County jurisdictions
- Established network of contacts within engineering consulting industry and city and statewide agencies

#### Entry Level Transportation Engineers and Planners, in Boise, ID and Kirkland, WA

Required Qualifications

- Degree in Civil Engineering or Transportation Planning
- Superior analysis and communication skills
- Strong Customer service and effective team member skills

The Transpo Group offers excellent benefits with a competitive base salary and incentive opportunities. We offer flexible work hours; paid time off (PTO); employer-paid medical and dental insurance, group disability and life insurance for employees, and facilitate a

## POSITIONS AVAILABLE

program for dependent medical insurance; fund profit sharing plans; and provide professional education and development allowances.

Interested individuals are invited to send a resume, including a cover letter to: Email: [humanresources@thetranspogroup.com](mailto:humanresources@thetranspogroup.com)



Meyer, Mohaddes Associates, Inc. (MMA), a business unit of Iteris, Inc., is an industry leader in Intelligent Transportation Systems, Traffic Engineering and Transportation Planning. We have assembled a team of the brightest, most innovative ITS specialists, traffic engineers and transportation planners in the industry. We currently have positions available in our Long Beach, Anaheim, Las Vegas and Los Angeles offices for

*Assistant, Associate and Senior Transportation Engineers.* We're seeking highly motivated professionals with excellent written and verbal communication skills to join our team.

### ANAHEIM, CALIFORNIA

**ASSOCIATE TRANSPORTATION ENGINEER #6116:** Task Leader/Project Engineer with planning and design of ITS communications systems as well as understanding of general traffic engineering and traffic operations elements. BS degree with 2-5 years experience in traffic engineering, ITS and design principles. Microstation, AutoCAD experience required.

**SENIOR TRAFFIC ENGINEER #6014:** Project Manager/Task Leader/Project Engineer on traffic engineering projects. Will also assist with business development activities including outreach, proposal preparation and interviews. BS degree with at least 7 years experience in all aspects of traffic engineering including signal timing analysis and implementation.

Familiarity with traffic operations and working knowledge of different traffic controllers and signal systems. Synchro, SimTraffic, Vissim, experience as well as knowledge and experience with MUTCD standards required.

### LONG BEACH, CALIFORNIA

**TRANSPORTATION ENGINEER/PLANNER #6080:** Project manager/task leader for traffic and transportation analyses for a variety of projects for private developments as well as for cities and agencies. Key tasks include leading technical projects, assisting Principals and senior staff, independent technical analysis and research, supervision of junior staff, preparing reports and presentations, interaction with clients, and assisting with business development. BSCE with at least 5 years experience with traffic engineering and transportation planning principles.

### LOS ANGELES, CALIFORNIA

ASSOCIATE TRANSPORTATION



**FEHR & PEERS**  
TRANSPORTATION CONSULTANTS

Fehr & Peers is hiring **Transportation Enthusiasts.**

Fehr & Peers is a leading transportation consulting firm in the U.S. and one of the only ENR 500 firms to focus exclusively on transportation planning and traffic engineering. Our staff is exposed to a wide breadth of projects, disciplines, and training opportunities to help them reach their career goals.

#### Areas of Expertise:

- Bicycle & Pedestrian Planning
- Intelligent Transportation Systems
- Land Use & Transportation Planning
- Smart Growth
- Traffic Calming
- Traffic Engineering Design
- Traffic Operations & Simulation
- Transit Planning & Operations
- Transportation Systems Planning
- Travel Demand Forecasting

#### Office Locations:

- Denver, CO
- Orange County, CA
- Reno, NV
- Roseville, CA
- Sacramento, CA
- San Francisco, CA
- San Jose, CA
- Salt Lake City, UT
- Walnut Creek, CA

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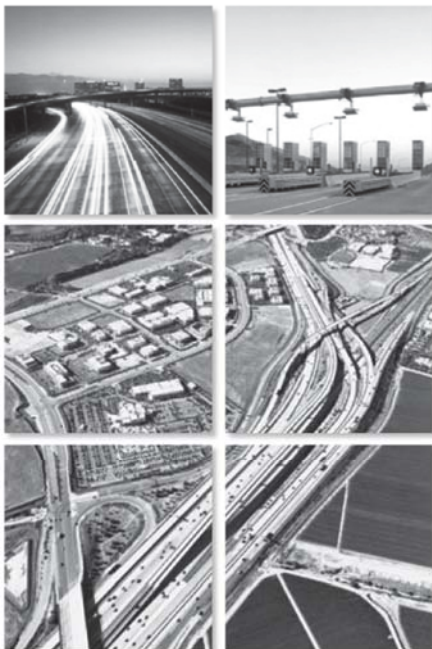
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