

# Westernite

Official Publication of District 6 of the Institute of Transportation Engineers

March – April 2008 Vol. 62 No. 2

## President's Message

As you read this message, spring has sprung with flowers and new District activities are blossoming. In this edition of the WesternITE, the Midyear Board meeting will be highlighted as well as new programs for the District.



Jennifer Rosales,  
President

The Western District Board meeting was held in Denver at the end of January and attended by District officers, international directors, committee chairs, and Section and Chapter leaders. I would like to wish the best of luck to our candidates for International Director and Secretary-Treasurer and thank them for their continued commitment and participation in the District. I would like to encourage you to take the opportunity to get to know each candidate and take the time to vote in the election.

As I mentioned in my last couple of messages, it is one of my top priorities to reach out to young professionals and potential new members. A new Employer Recognition Award has been developed by

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## Mid-Year Board Meeting Highlights

On January 25, the District 6 Board, committee chairs, and guests met at the Hotel Monaco in Denver, Colorado. The full-day meeting included reports from each of the Board's officers, the District's three International Directors, the District Administrator and many of the District's committee chairs. Following are highlights of some of the key issues discussed and actions taken by the Board.

President Jennifer Rosales described her activities over the last several months, including her trips to many local sections and chapters. She presented presidential proclamations to James D. Brogan, Ahmed Aburahmah, and Terry Gibson. Jennifer also announced that Jon Pascal was resigning as the District's webmaster, and she thanked him for his many years of service.

Vice President Monica Suter reported on the 2006-2007 fiscal year financial results. She noted that \$49,000 was added to the student endowment fund during the fiscal year. Monica also discussed the need to evaluate the amount allocated in the budget for offsetting the travel expenses of the District's committee chairs. It was noted that travel costs have increased and that there are now more committee chairs than in the past so additional funds may need to be allocated to this budget item. Secretary-



Michael Sanderson,  
Secretary-Treasurer

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## Transportation in the OC

### A Preview of What to Expect at the Annual Meeting in Anaheim

ITE's 2008 International Annual Meeting will be held in Anaheim, California from August 17-20, 2008. The area offers numerous opportunities for ITE members and transportation professionals to observe transportation programs and facilities in the region. This article provides an overview of some of the interesting, innovative, or unique transportation projects and programs in the area.

#### County Overview

Orange County, California, has a population of about 3 million people. It is primarily located on a coastal plain and low foothills southeast of Los Angeles. Although early development occurred as a suburb of Los Angeles, the County has grown to assume a strong identity of its own, with a large employment base and substantial business in computer hardware, medical

equipment and supplies, tourism, finance, engineering, and professional services.

While offering world class tourism opportunities at its beaches, resorts, and shopping areas, it is also possible to visit destinations in Los Angeles and San Diego while in Orange County. AMTRAK and Metrolink trains offer convenient alternatives to freeways that often can be congested. Careful research and planning is required to see points of interest without an automobile. Visitors should be warned that distances and travel times in Southern California are much longer than they may appear from a glance at a map.

The County has a long standing and once-earned reputation for being highly conservative in politics. President Richard Nixon was born here and his presidential library is located in the city of Yorba Linda.

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## Mid-Year Board Meeting Highlights

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Treasurer Michael Sanderson will evaluate this in preparation of the next annual budget.

Past President Dalene Whitlock presented her report via telephone. As Past President, Dalene serves as chair of the nominating committee, and she presented the committee's recommended slate of candidates. The Board approved the slate as follows:

President – Monica Suter  
 Vice President – Michael Sanderson  
 Secretary-Treasurer –  
 Edgar Perez and Larry Wymer  
 International Director –  
 Ken Ackeret and Alex Ariniello

A coin was flipped to determine the order that the candidates' names will appear in the WesternITE and on the District website. In the past, a coin flip also determined the order that the candidate's names would appear on the ballot. However, with the new electronic ballots, the candidates' names will appear randomly on each ballot.

International Director Julie Townsend presented a report of her recent activities and highlighted the Institute's strategic planning efforts. She also discussed the decision to switch the order of the San Diego and Seattle meetings, which are both joint International/District 6 meetings, due to hotel scheduling issues.

International Director Randy McCourt highlighted in his report the several new and updated ITE manuals that are coming out. In light of the new publications coming out, Randy discussed that colleges and universities will need to update their reference libraries and that this might be a worthwhile use of funds from the District 6 Student Endowment Fund. Randy also discussed some of the significant challenges coming up with the next re-authorization of federal transportation funding.

District Administrator Jenny Grote started her report by presenting President Rosales with a commemorative street sign for her service as District 6 president. Jenny then discussed her evaluation of the District's first year using the new e-ballots, including several minor logistical issues. One issue she identified was the apparent confusion caused by the similar look and timing of the District and International ballots. The board agreed that additional communication will be required to minimize confusion. The board also discussed whether the District's bylaws still apply to the new e-ballot procedures. In

the end, the board agreed that no bylaw changes were required.

At the direction of the board, Ken Ackeret had convened a task force to consider providing election results to candidates in advance of the annual meeting, similar to the practice established by International ITE. Ken's task force recommended that the District not change their practice of announcing winners at the meeting, and the board concurred.

Nate Larson, WesternITE Advertising Coordinator, presented the WesternITE report for Doug Smith, the WesternITE editor, who was absent. Nate discussed a proposal to begin distributing the WesternITE newsletter electronically, which would save significant printing costs. He discussed two options for District members to choose their method of delivery, opt-in or opt-out. The board tasked the WesternITE steering committee with developing a plan that could be announced at the Annual Meeting in Anaheim. Nate also announced that they were seeking a new column to replace Jerry Hall's long-running Adobe Tower column, which will be ending.

Karen Aspelin, Technical Committee Chair, reviewed the awards presented by her committee last year, and she reported that six student chapters had submitted seven proposals for the data collection fund grants.

Walt Stringer, Legislative Committee Chair, requested that members provide him with information from their home states on upcoming legislative issues.

Craig Grandstrom, Career Guidance Committee Chair, reported on the status of the mentoring program. He said that he has received fewer applications this year from mentees, but he has still had good response from mentors. Craig presented the plan to nominate and present to career guidance awards this year, a Young Professional Achievement Award and a Best Annual Meeting Paper Award by a Young Professional. He also discussed a proposal to implement an Employer Recognition Award to honor one or more organizations for supporting ITE involvement by their younger employees.

Alyssa Reynolds, Student and Faculty Initiatives Committee Chair, said that her committee did not present any of its usual awards (outstanding student, outstanding grad student and outstanding faculty) this year because of a lack of nominations. Likewise, she reported that she had received no proposals for this year's Kell Competition. She asked for the board's help in encouraging better participation. Alyssa said that Scott

Lee from Transpo Group in Seattle had taken the job of Student Newsletter Editor.

Mark Lichty, the new Vendor Committee chair, reported on the very successful vendor show held at the Portland meeting. He noted activities like the "Passport" and the technical poster session, which encouraged people to visit the vendor show multiple times, generated a lot of positive feedback from the vendors. He suggested that a "best practices" section be developed for the vendor section of the Local Arrangements Committee manual, which he agreed to help develop.

Cathy Leong, Endowment Fund Committee Chair, summarized the full-day workshop that her committee held the previous day, and she reported that the endowment fund currently has \$79,000 in deposits. She showed the board the logo that had been selected by the committee to brand endowment fund mailings and products. In addition she said that the committee would be working to setup an endowment fund website, which would be able to take credit card donations online. Cathy presented several fundraising ideas for the annual meeting, and she suggested that awards be established to recognize ITE sections for their fundraising efforts.

President Rosales acknowledged receipt of a statement of interest from the Arizona Section to host the 2013 annual meeting. She invited them to give a formal presentation in Anaheim.

Peter Koonce, LAC Chair for the 2007 Portland meeting, presented his final report. He discussed many highlights of the successful meeting and reported that they would be returning \$58,000 to the District. The board recognized the outstanding efforts of Peter and his local arrangements committee, including the participation of the Portland State student chapter. In recognition, the board voted to donate \$5,000 of the meeting's net revenue to the PSU student chapter and to direct the remaining proceeds to the District's student endowment fund.

Zaki Mustafa gave a brief summary of planning efforts for the 2008 Annual Meeting scheduled for August 17 – 20 in Anaheim, including the final LAC budget. Since this is a joint meeting with International, most activities are provided under the International registration fee. The board approved a \$50 surcharge for District 6 events at the meeting.

The next District 6 board meeting will be on Sunday, August 17 in Anaheim.

## Velib—City of Paris “Bicycle Transit System”

In a recent visit to Paris, France this fall, we were introduced to the recently developed **Velib** – City of Paris “Bicycle Transit System.” This short-term bicycle rental transportation system was debuted on July 15, 2007 as an alternative to the City’s existing public transit and taxi system. Velib is a name that combines the terms “vélo” (bike) and “liberté” (freedom) and is one of the most ambitious short-term bicycle rental systems in the world.

Velib was the idea of Paris’ mayor, Bertrand Velanoe. His goal is to double the number of bicycles in the French capital by 2008. The Mayor has opened up almost 125 miles of additional bicycle paths throughout the City and, in many cases, reduced vehicle travel lanes, which has been resisted by a number of motorists throughout the City.

While traveling the streets of Paris, we noticed the Velib bicycles and their docking stations throughout the City. Usage has increased from 90,000 rentals per day to 175,000 rentals per day in only three months. It is projected that the revenue from the Velib rental system will generate over 30 million Euros (\$44 million) per year. The City of Paris is projecting 1,451 Velib docking locations and 20,600 bicycles by the end of 2007.

### System Description

The Velib system is a short-term bicycle rental system that has been implemented throughout the City of Paris. Other similar systems have been created in Germany and the Netherlands; however, the Paris system is by far the largest and most successful system currently in place in Europe. The primary purpose of the Velib system is to replace short-term trips usually made by public transit, automobiles, taxis or even walking. Velib customers can easily access the rental bicycles and use it for relatively short trips (one half-hour to an hour) and leave their rented bicycle at one of the

many convenient docking stations located throughout the City. The Velib system consists of sturdy 3-speed rental bicycles, docking stations with approximately 15 storage positions, convenient signage at docking stations indicating the other docking locations within a reasonable bicycle range, and an active maintenance program which repairs and replaces bicycles when needed.

The initial system included approximately 10,600 bicycles located at 750 self-service docking stations. By the end of the year, it is projected that over 20,600 bicycles will be available for short-term rental at nearly 1,451 docking stations.

Velib users simply swipe their user card on the electronic reader at the docking stations, remove the bicycle, and pedal off to their destination. Designed to accommodate primarily short trips (1-3 miles), the user simply finds a convenient, vacant docking station, re-docks their bicycle and walks away. It was interesting to see that most of the users were dressed in normal work attire and were typically heading for work, business or shopping destinations. The Velib system is not designed to accommodate recreational bicycle riding, but is certainly useful for visiting the numerous destinations throughout the City of Paris.

### System Costs

The Velib system is accessed electronically through the use of a Velib carte. The Velib cartes can be obtained through the Internet. The processing time is about 15 days. A one-year subscription costs 29 Euros (\$43), however, there are other options for obtaining cartes on a short-term basis on the Velib system. A one week pass would cost the user 5 Euros (\$7), whereas a one day pass would be 1 Euro (\$1.50). Velib users can obtain their passes at the “borne,” which is a tall, free-standing ATM-type device located at each of the Velib docking station locations. The Velib passes are also tied to the City of Paris “Navigo” pass which is

used throughout the City to access the public transit system.

Enrollment in the Velib program requires a deposit of 150 Euros (\$222) which is not removed from your account unless the Velib bicycle is not returned to an appropriate docking station. This is the one incentive that the users have for not stealing or vandalizing the bicycles.

The annual, weekly or daily pass enables the Velib user to have thirty minutes of usage for each time a bicycle is used at no additional charge. The following charges are made when the same Velib bicycle is continuously used beyond the free 30-minute period:

- Additional 30 minutes after the initial free 30 minutes: 1 Euro (\$1.50)
- Second half hour beyond that: 2 Euros (\$3.00)



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## Velib—City of Paris “Bicycle Transit System”

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- Third half hour beyond that: 4 Euros (\$6.00)

Again, the primary purpose of the Velib system is for short-term trips, therefore, trips of one half-hour or less (up to approximately 5 miles) can be made without any additional fee. It is cost-effective to return the bike in a timely manner, since the Velib system is primarily an alternative to public transportation or walking. It is not intended to be used for leisurely, day-long bike rides, however, Velib users can make multiple trips by docking their Velib bicycle for approximately two minutes and then taking out another Velib at any station in the City. In this manner, longer distance trips can still be made without additional charges beyond the initial annual, weekly or daily pass fees. In the event that all the docking stations are filled at a particular station, there is some concession in returning the bicycle late. When this occurs, an extension of time, without incurring additional charges, is allowed.

### System Users

The Velib system requires that all users be fourteen years of age or older. Between the ages of fourteen and eighteen, parent permission is required in advance when obtaining the appropriate Velib carte. There is no upper limit age in using the Velib system.

### Bicycles and Docking Stations

The Velib 3-speed Roadster bicycles are sturdily constructed (see photo, page 3) and are rather heavy. The bicycles include handbrake, 3-speed transmission, front and rear fenders, and appear to be very durable based upon the high turnover of rentals.

Additional amenities include front and rear lights which are on at all times when the bicycle is in use and an electronic dashboard showing the amount of usage for each rental period. The bicycles include a front basket, kick-stand, and a separate lock which can be used for intermediate stops when the bicycle is not at a permanent docking station. The locks do provide an opportunity for security in the event that an intermediate stop is necessary.

The electronic docking stations have 15 docking positions for parking the rental bicycles. They are conveniently located about 300 meters apart (approximately 1,000 feet) and a lighting system at the docking stations indicates which bicycles are currently available at each docking station. There is a

kiosk with a map indicating the current site position and nearby destination docking stations in the surrounding area. With this information, the Velib users can determine an ultimate destination before taking off from their current location and complete their trip within the free half-hour period.

### Program Sponsorship

The Velib program is sponsored directly with no cost to the Paris government. JC Decaux sponsors the program in return for advertising rights throughout the City of Paris. JC Decaux is the largest advertising firm in the City of Paris. JC Decaux has the exclusive rights to advertise on 1,628 Paris changeable billboards throughout the City. The billboards include rotating advertisements on double-sided displays which are posted throughout the City. The billboards are ground mounted and are substantially smaller than typical USA billboards (approximately 4 feet x 8 feet).

The sponsor provides all of the bikes, docking stations, and full operation/maintenance of the equipment at no cost to the City. There is potential for the City to earn up to 30 million Euros (\$44 million) per year in rental fees.

### Maintenance and Vandalism

Maintenance is provided by the JC Decaux Company who has a staff of 200 maintenance workers who are constantly repairing flat tires, broken chains, and replacing parts for the rental bicycles. During the transit strike, they employed over 300 maintenance workers because of the increased demand. The maintenance crews traverse the streets of Paris on electrically powered bicycles which enables them to access the over 1,000 docking stations throughout the City in a timely manner. Additionally, the maintenance program includes a storage barge located on the Seine River. The barge is used for the storage of bicycles under repair and inventory of additional bicycles to be used on an as needed basis. Most bicycles that we saw during our trip were well maintained and did not appear to be in need of repair or replacement.

To date, there has been limited vandalism to the equipment during the first three to four months of operation. The bicycles are rarely stolen from their docking stations or once they are rented. While observing the bicycles on our trip, no acts of

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State of California. Robert received his Bachelors and Masters of Science degrees from the University of California Berkeley.

**Allison Kahn Goedecke, M.B.A.** is a Senior Transportation Planner for RK Engineering Group, Inc. located in Newport Beach California. Allison has been involved in transportation studies for the past ten years and is a member of the APA (American Planning Association). Her work at the company has included traffic impact studies, community association traffic reviews and shared parking studies. In addition, Allison has also written a children's book, "One Fun Thing", and writes a quarterly article in Coast Kids Magazine. She received her bachelor's degree in Economics from UC Irvine and her M.B.A. from Pepperdine University.



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## Velib—City of Paris “Bicycle Transit System”

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vandalism were apparent at the numerous docking stations we passed.

### Conclusion

The Velib bicycle system in the City of Paris has been a resounding success. The bicycle system was invaluable during the recent public transit strike which greatly limited subway and bus use and resulted in traffic gridlock on the local roadway system.

The usage of the bicycles has increased substantially from 90,000 daily rentals to over 175,000 rentals per day during the height of the public transit strike. Over 200 maintenance workers are constantly ensuring that the system is in working order and

available for customers. The reasonable cost and quality of service has made the Velib competitive to public transit, walking and taxi cabs. The typical daily user is a working person in downtown Paris and who needs to get to their destination in a reasonable time, considering the traffic congestion and time involved in other forms of transportation.

By the end of 2007, there will be nearly 1,451 daily docking station locations (approximately 1,000 feet apart) with over 20,600 bicycles provided throughout the City of Paris. The Velib system is a great asset to the community. Based upon the success of the Velib system in Paris, many U.S. Cities (i.e. Chicago) are considering similar systems. Time will tell if this new system will

retain its current level of enthusiasm and quality of service. Yet, after the first three to four months, it appears to be immensely successful.



## Find Which International ITE Council is For You!

Check <http://www.ite.org/councils/index.asp>” to get more involved and to partner on key projects with members across the globe!

# Slate of District 6 Candidates Announced

## Candidate for President

**Monica M. Suter**

## Candidate for Vice President

**Michael Sanderson**

## Candidates for Secretary-Treasurer

**Edgar Perez**

**Larry Wymer**

## Candidates for International Director

**Ken Ackeret**

**Alex Ariniello**

## President's Message

*(Continued from page 1)*

Craig Grandstrom, District Career Guidance Committee Chair, to recognize employers for support of young professional involvement in ITE Activities (young professional is defined as an ITE member, 35 years of age or younger). Young Professional enthusiasm, meaningful involvement, and growth are the keys to ITE's future. As a means of fostering individual Young Professional participation in Society activities, ITE Western District has developed a program to help Sections and Chapters recognize those employers who encourage their Young Professionals to get involved.

During the meeting, a proposal to distribute the WesternITE newsletter electronically was discussed. The WesternITE committee, which includes Nate Larson (WesternITE Advertising Coordinator), Doug Smith (WesternITE Editor), Jon Pascal (WesternITE Web Manager), Monica Suter (Vice President), and Randy McCourt (International Director), will be developing a plan for electronic distribution to be presented at the Annual Meeting in Anaheim. If you have comments regarding electronic distribution of the WesternITE, then please contact anyone on the WesternITE committee or me.

The District Endowment Fund committee, chaired by Cathy Leong, also met in Denver for a workshop during the Midyear Board meeting. The Endowment Fund committee has developed a new logo.

An endowment fund website with online donation capabilities is being created. During the workshop, the committee brainstormed fundraising ideas for the Annual Meeting and throughout the year. The committee discussed ideas to appropriately recognize Section supporters, members, and sponsors of the Endowment Fund. Again, I want to thank the membership, individuals, Sections and Chapters, and corporate sponsors for your generous donations to our growing District Endowment Fund.

I would like to continue to take the opportunity to recognize ITE members for their distinguished service to ITE and the industry. Many thanks to the Southern Arizona Chapter for hosting me in Tucson in February. It was my pleasure to recognize Diahn Swartz with a Presidential Proclamation for her distinguished service and contributions to ITE. Diahn is a Past President of the Southern Arizona Chapter of ITE and she led the development of chapter bylaws during her presidency. She is currently the Chapter's training chair and prepares the Chapter certificates and awards.

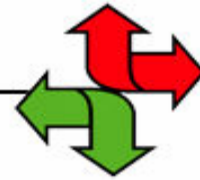
I would also like to thank the Montana Chapter for hosting me at the Montana Spring Engineering Festival and ITE Chapter meeting. At the Chapter meeting, I had an opportunity to install their new officers. It was my pleasure to recognize Terry Smith with a Presidential Proclamation for his distinguished service and contributions to ITE. Terry is a Past President of the Intermountain Section and

Past President of the Montana Chapter of ITE. Terry is a founding member of the Montana Chapter and was instrumental in writing the by-laws and constructing the charter as well. He served as Co-Chair of the LAC for the 2005 District Annual Meeting in Kalispell. After the Montana Chapter meeting, the members went to the Montana State University versus Portland State University basketball game which was a great opportunity to network with members and have fun.

It is now time to mark your calendars and begin planning for the 2008 District Annual Meeting (joint with International) in Anaheim from August 17-20, 2008.

# Proposed Amendments to MUTCD

## Manual on Uniform Traffic Control Devices (MUTCD)



### Proposed Amendments to the Next MUTCD Edition Coming Soon! Be Sure to Review and Comment!

On January 2<sup>nd</sup>, 2008, the Federal Highway Administration (FHWA) published the Notice of Proposed Amendment (NPA) to the Manual on Uniform Traffic Control Devices (MUTCD) 2003 Edition in the Federal Register for public review. It contains several significant revisions and additions, many of which will require public agencies to replace existing signs, and modify traffic signal or other traffic control devices by the required compliance dates. Other changes will require jurisdictions to change the way their existing devices currently operate such as for pedestrian signal timings. Advanced planning for these changes is recommended to minimize the implementation impact to staff and funding resources. Non compliance with the MUTCD (based on federal law) can also

affect an agency's liability. As a result, agencies are recommended to closely review the proposed changes and provide substantive comments to the docket before **Thursday, July 31, 2008**.

The changes can be reviewed in various formats on the website at <http://mutcd.fhwa.dot.gov/>. FHWA's slide show provides a visual overview of changes and additions throughout. Specific changes throughout the document can be reviewed in "clean text" or text where edits are shown. Changes to Tables and Figures are summarized to help focus where more significant changes are located. New Sections, Figures and Tables should also be reviewed to identify new options, recommendations and requirements of agencies.

The significant changes are anticipated to affect public agencies and all transportation professionals due to proposed changes, deletions and additions to the manual. It is recommended that the actual

NPA document be reviewed by agency transportation practitioners. Additionally, FHWA adopted Revision 2 of the MUTCD in December of 2007. This includes new retro-reflectivity requirements.

Consequently, Revision 2 should also be reviewed by agencies to provide comments and access anticipated impacts since its changes will be merged with the NPA version of the MUTCD for the next edition. It is recommended that agencies continue to use their current, state-adopted version of the MUTCD while reviewing proposed amendments to provide important comments and to plan for how compliance will be obtained with limited resources prior to the deadline of **Thursday, July 31, 2008**.

Comments may be submitted to the docket by mail or go to [www.regulations.gov](http://www.regulations.gov) to submit comments electronically.

## Summer Transportation Institute

The Western Transportation Institute at Montana State University will again host the Summer Transportation Institute (STI) for rising 10th, 11th, and 12th graders. Please work with teachers and counselors to identify two candidates from your school for this innovative two-week summer experience on MSU campus. The STI introduces students to new frontiers in transportation through fun, hands-on science, engineering, and technology activities, field trips, guest speakers, and team design projects. Students will learn about career opportunities in transportation while experiencing college life. In addition, students participate in an evening sports and recreation program as well as college preparatory and career enhancement activities. The STI is sponsored by the Federal Highway Administration and Montana Department of Transportation.

The STI will be held June 15-June 27, 2008. All selected participants will receive a full scholarship, which will cover all of their

room, board, and program expenses. Students with financial need may additionally request reimbursement for travel expenses.

Please help us identify potential students for the Summer Transportation Institute and assist them with completing the application package. Applications received by April 30 will receive priority. Additional information on the program and downloadable application forms can be found on our website at: <http://www.wti.montana.edu/Education/SummerTransportationInstitute.aspx>

If you have any questions regarding this program, please contact Susan Gallagher, STI Project Director at: (406)994-6559 or by email at: [sgallagher@coe.montana.edu](mailto:sgallagher@coe.montana.edu).

### Field Trips

Meeting professionals in their workplace is the best way to learn about career opportunities. STI participants take a number of field trips during the program to experience different modes of transportation and to experience transportation careers. Some examples are provided below:

- Train ride in historic Virginia City
- Gates of the Mountain ferry ride
- Trident cement factory
- Montana Department of Transportation headquarters
- Gallatin Field airport
- Yellowstone National Park

## Transportation in the OC

*(Continued from page 1)*

The Airport is named after a prominent former resident, John Wayne. However, increasing population, immigration, and demographic trends have produced a more hybrid population.

The County is nearly fully developed. There are some large vacant lands remaining in the most southerly areas of the county. Two large decommissioned military bases are being redeveloped in the Cities of Irvine and Tustin, and many communities are experiencing significant growth through infill and redevelopment activities. There is currently a lot of interest in 5-20 story residential condominiums in many areas of the county, especially in areas that were formerly developed as light manufacturing zones that have become less economically viable in recent years. Overall residential density is expected to continue to increase with these types of developments.

Transportation in Orange County is served primarily by the system of freeways that cross the county on an imperfect grid and along diagonals. The system can be confusing to newcomers, but the routes are well signed, and most tourist areas are located along the Interstate 5 and State Route (SR) 55 Freeways. Many locals refer to the freeways by their names instead of their numbers, but all locals uniquely refer to their freeways as if the number is the name. ("You take the Fifty Five north from the Airport until you get to the Five...")

The County has an extensive bus system operated by the Orange County Transportation Authority (OCTA) as well as smaller systems operated by local agencies. AMTRAK and Metrolink operate frequent trains along a corridor through the County from Los Angeles to San Diego, but there is no light rail or other rail-based service in the County at this time. Metrolink and AMTRAK have a station in the Anaheim area that can be reached from the Disneyland Resort Area by the City of Anaheim Resort Area Transit Network.

### Toll Roads

Orange County is distinguished by a significant network of Toll Roads. There are two separately owned and administered toll road systems, the 91 Express Lanes and the Transportation Corridor Agencies' network. The 91 Express Lanes were developed using private funds under a franchise agreement granted by the State. The 91 Express system provides two managed lanes in each direction within the median of SR 91 that connects Orange County to the inland communities of

Riverside and San Bernardino Counties. These inland communities are experiencing tremendous residential growth and strong commuting to job-rich Orange County.

Tolls on the 91 Express vary by time of day based upon demand and time savings, but peak period tolls are among the highest in the Nation, with the one-way trip costing about \$10 along the 10-mile facility. This can result in a time savings of 30 minutes or more during peak periods, because of notorious congestion along the main lines of the 91 Freeway. A remarkable number of drivers agree to pay the \$1 minimum toll during light traffic hours when there is no expected travel time benefit.

All tolls along the 91 Express are paid by transponder. There are no cash toll collection facilities. Visitors should not plan to drive along the lanes without a FasTrak transponder. The Transponder possession rate is extremely high for residents along the 91 corridor.

The 91 Express lanes system ran into some controversy a few years ago when its private owner enforced a "no compete" clause in its franchise agreement to prevent minor improvements to the parallel and heavily congested 91 Freeway. The controversy grew into a statewide issue that threatened to bring down all future public/private toll roads in the State. The issue was finally settled when OCTA acquired the facility from the private investment firm at an agreed cost, assuming the obligation for the bonds that were used to fund its construction. OCTA has relaxed enforcement of the non-compete clause and has actually funded parallel improvements using surplus revenues. The facility is having no problems meeting its financial debt obligations.

The 91 Corridor remains a major circulation issue for Orange County and communities to the east. An ongoing major investment study as analyzed alternatives for improving mobility in the corridor. One frequently mentioned alternative is the construction of a major highway tunnel somewhere through the mile-high Santa Ana Mountain range that begins just south of the 91 Corridor and extends south for many miles. The only existing route over these mountains is the torturous but scenic 2-lane Ortega Highway (Route 74) that winds to an elevation of over 3000 feet through switchbacks and along steep drop-offs. Proposed tunnel routes could be over 3 miles long and have generated environmental concerns. Any approved tunnel would almost certainly require tolls for construction financing.

The Transportation Corridor Agencies (TCA) operates the other significant toll road network in the County. TCA has constructed a system of over 50 miles of toll roads in the eastern foothills and along a route about 4-miles inland from the Pacific coastline. The TCA is a joint powers agency composed of the County and various city governments. The TCA facilities were built through a combination of toll bonds, developer fees, and highway funds. User tolls and future developer fees continue to pay off the bonds.

While TCA facility tolls can be paid in cash at mainline and ramp toll gates, the majority of users pay with FasTrak electronic toll collection transponders. The percent of transponder use approaches 80% in peak hours. FasTrak transponders are valid for either 91 Express or the TCA system and can also be used to pay tolls on most northern California toll facilities. The routes offer panoramic vistas of the county as well as glimpses of large undeveloped areas (including public lands that will likely remain undeveloped permanently). The San Joaquin Hills Corridor main line plaza is known as the Catalina View Plaza. On clear days, the famous island is visible in the ocean 26 miles away.

TCA is working to complete its planned system with a 15-mile extension of the Foothill corridor south to where it is planned to join Interstate 5 at the San Diego County line. The route has run into significant environmental opposition, due to the undeveloped lands where it would facilitate growth, but primarily due to the proximity of the convergence with I-5 near a popular surfing spot, Trestles Beach. TCA expects construction to begin within 5 years, while the opposition has other ideas.

### Carpool Lanes

Orange County has one of the most extensive carpool (HOV) lane networks in the Country. There are over 200 miles of carpool lanes along virtually every route through the county (except along the 91 corridor and the TCA toll roads). The system is heavily used during peak periods and amply used at other times. Many facilities are operating at capacity, resulting in consideration of increasing occupancy requirements or provision of additional lanes. Any two-person carpool can use any of the facilities, however carpool restrictions are in effect 24 hours and 7 days.

The carpool lane network includes several freeway-to-freeway interchanges that

*(Continued on page 9)*



## Transportation in the OC

provide direct connectors between carpool facilities. These facilities allow users to switch freeways without ever leaving the carpool network. The required bridge structures are often very high and very long. Visitors traveling from the John Wayne Airport to the Anaheim Resort area can drive on one of these facilities while transitioning from Route 55 to Interstate 5. The configuration of carpool connectors at the 55/405 Freeway confluence near the John Wayne Airport is also substantial and intricate.

Special ramps have been provided from the carpool lanes directly onto city streets at several locations in the county, including locations near the Anaheim Resort Area. A number of additional HOV ramp facilities and connectors are planned.

### Rail

Metrolink and Amtrak jointly operate passenger trains along the LOSSAN Corridor that passes through Orange County. Trains operate on headways of 1 to 2 hours in each direction on the San Diego line. Metrolink operates additional trains that serve communities to the east, mostly connecting to downtown Los Angeles. These other trains are primarily operated on directional peak period schedules and do not provide good opportunities for non-commuter trips. Metrolink owns most of the San Diego line tracks in Orange County, and it plans a number of track improvements, however much of the route remains single track, limiting headway reductions. Additional passenger service is planned or desired, but track capacity limitations must be addressed. Insufficient vehicle parking at rail stations is also an emerging issue.

### Air

John Wayne Airport is the County's only airport with commercial passenger service. While the airport is the second-busiest in the Los Angeles region, its flights are limited by aircraft noise impacts and court-ordered flight limits. The number of flights has increased steadily over the years based upon use of aircraft with reduced noise, but the demand for air travel through the airport is constrained by flight limitations and slightly higher airfares than nearby airports. The flights also tend to fill early, especially at peak flying hours. The airport has connections to major carriers' hub cities (Chicago, Dallas, Houston, Atlanta, etc.), but has non-stop service to very few eastern U.S. destinations. The airport has an infamous take-off procedure to minimize noise

impacts. The pilots will warn you before take off. However, the location of Anaheim offers many airport alternatives including Long Beach, LAX and Ontario.

### Notable Facilities

Freeway construction in Orange County has generally used the traditional Design/Bid/Build system that is used by the State Department of Transportation (Caltrans). Using special legislation, a 10-mile segment of the SR 22 Freeway was recently expanded by two lanes in each direction and fully reconstructed using Design/Build contracting. This is the first time that a Design/Build contract has been used for the expansion of a major freeway under use in the State. The project required special legislation, but the upgraded facility was opened to traffic at least four years sooner than the traditional approach would require. All lanes were opened to traffic on schedule, but disputes over final construction items and total costs continue.

Orange County has undergone a tremendous amount of freeway expansion construction over the past 10-15 years. Visitors will notice that most of the important freeways in the County appear to be newer than the surrounding communities. Some persons also have indicated that the County appears to be attempting to build itself out of congestion through aggressive freeway widening projects. The County's efforts have been largely funded by Measure M, a half-cent sales tax that was passed about 15 years ago. The measure provides funding for mainline freeway improvements, interchange improvements, local government improvements and miscellaneous improvements. The funds are managed by OCTA, and the Measure M program is closely overseen by a watchdog oversight commission to insure that the program only funds improvements that were identified in the enabling measure.

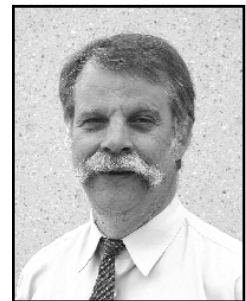
Measure M was passed by the voters to include funding for a central county guideway or light rail system. However the County has had difficulty identifying an appropriate starter route, ultimate system configuration, and necessary buy-ins. Planning for a rail system was stopped about two years ago. Some of the cities in the County are beginning to plan for more modest systems that would extend from Metrolink/Amtrak stations to activity centers; however the County does not have a significant rail system in sight, beyond Amtrak/Metrolink heavy rail service. In response, OCTA operates one of the largest

bus transit systems in the Country that is not integrated with a companion rail transit system. Orange County voters recently expressed their approval of Measure M by extending the measure for another 20 years, including an itemized list of projects that would be provided if the measure passed. It received over 70% of the vote.

Visitors to Orange County can find all they need in the County's tourist areas, beaches, and shopping areas. However the County also provides many unique applications of transportation technology for ITE members and others with interest in how a bedroom community of the 1950's and 1960's has emerged as an edge city and strong regional economy. All of this will be on display at ITE's 2008 Annual Meeting in Anaheim. Let's hope to see you there.

### About the Author:

**Rock Miller, P.E., P.T.O.E.**, is a fellow for the Institute and recently served on the International Board of Direction after holding leadership positions in the Western District. He is currently Vice President of KOA Corporation and is manager of its Orange County office. He is also serving as Co-Chair for the ITE 2008 Annual Meeting.



# Section and Chapter Activities



## New Mexico Section

*March 2008*

### Technical Program

“Status Report on the ITS Program in New Mexico” presented by Rob Fijol, FHWA New Mexico Division ITS Engineer. Mr. Fijol presented a general status report on the ITS program in New Mexico. What is being done now and what is being planned for the future. Also discussed was the formation of ITS New Mexico, a new chapter of the national organization ITS America.

*April 2008*

### Technical Program

“How the Albuquerque Journal develops its Editorials Concerning Transportation Issues in New Mexico” presented by D’val Westphal, Assistant Editorial Page Editor. Mrs. Westphal presented the approach the Journal followed to come up with its positions concerning Paseo Del Norte/Jefferson/I-25 Project, automated enforcement for red light running, Rail Runner Project, Proposed Central Avenue Streetcar Project, Proposed NMDOT General Office Private Land Development with Transit Station in Santa Fe and the Spaceport Project.



*Ross E. Lujan,  
Secretary/Treasurer*



## Central California Section

*April 2008*

Our April 17, 2008 meeting was held at Grand Occasions in Fresno and was sponsored by VRPA Technologies. Fifty-five members and guests were in attendance.

### Technical Sessions

Our first presentation was a comprehensive presentation by Georgiena Vivian on the Metro Rural Loop multi-jurisdictional planning effort. The Metro Rural Loop is a conceptual idea to link the various cities located within Fresno, Madera and Tulare counties by a multi-modal transportation corridor. It is an innovative regional development approach envisioning a Multi-Modal, Multi-City, and Multi-County Transit-Oriented Transportation Corridor System that would directly and efficiently link the development of incorporated cities in Fresno, Madera and Tulare Counties, and define one of the most significant, sustainable, effective, and attractive Smart Growth oriented regional metropolitan areas for the future of California.

Our second presentation was by Ted Smalley, Deputy Executive Director of the Tulare County Association of Governments.

On November 7, 2006, the voters of Tulare County approved Measure R, imposing a ½ cent sales tax for transportation within the incorporated and unincorporated area of Tulare County for the next thirty years. The transportation sales tax funds will be spent in accordance with the Expenditure Plan that resulted from a joint effort among all the cities and the County of Tulare. The Expenditure Plan reflects the transportation needs of the residents of Tulare County. The plan includes funding for Regional Projects,

Local Programs, Transit/Bike/Environmental Programs and Administration. The funds will be distributed as follows:

- Regional Projects (50%)
- Local Programs (35%)
- Transit/Bike/Environmental (14%)
- Administration and Planning Program (1%)

The proposed 30-year Transportation Measure is expected to generate a total of \$652 million over the life of the Measure. Financing mechanisms such as short term lending and bonding are currently being looked at to expedite the delivery of transportation projects and deliver them as soon as possible.

### Raffle

Raffle prizes were provided by VRPA Technologies, Omni-Means and Lew Roberts of ITERIS.

### Future Meetings

July 16, 2008 – Visalia  
Sponsored by TPG Consulting

October 16, 2008 - Fresno



*Mike Bitner,  
Scribe*

## Section and Chapter Activities



### Colorado/ Wyoming Section

*April 2008*

The 6<sup>th</sup> Annual Spring Transportation Symposium presented by the ITE Colorado/Wyoming Section and the WTS Colorado Chapter in conjunction with ITSRM (ITS Rocky Mountain Chapter) was held on Friday, April 4, 2008 at the Marriott Denver South at Park Meadows, Lone Tree, CO. This symposium included two morning sessions and a luncheon. All proceeds from the event went to fund scholarships for ITE, WTS, and ITSRM.

The first session included a panel discussion of Sustainable Transportation: Individual Choices, Global Results. The second session included three breakout discussions with presentations focused on Sustainable Streets, Civil Engineering Projects, and Challenges to Implementation.

The luncheon meeting began with CO/WY ITE Section President Joe Henderson thanking and recognizing sponsors of the event. Section business was then briefly discussed. Next, the luncheon speaker was introduced, the Honorable Alice Madden, Colorado State Representative, District 10.

The next meeting is set for the Denver Metro Area on Friday, May 9, 2008.

The Colorado/Wyoming Section contact is Joe Henderson of Short Elliott and Hendrickson, Inc., 303-441-5401; [jhenderson@sehinc.com](mailto:jhenderson@sehinc.com). Also, please visit our Section's website at [www.cowyite.org](http://www.cowyite.org).



*Curt Rowley,  
Scribe*



### San Francisco Bay Area Section

*April 2008*

Every April, the SF Bay Area ITE Section focuses on local transportation students. Each year, the Section invites local students to submit papers on a general transportation topic. This year, the Student Paper Competition topic was "Sustainable Living in the Suburbs". Students were asked to come up with policy recommendations related to transportation that would lead to "greener", or more environmentally sustainable, suburbs. The three prize winners presented their winning papers at the April Section meeting, held on April 24, 2008 at the Faculty Club of the University of California, Berkeley.

Professor Robert Cervero, Chair of the City and Regional Planning Department at UC Berkeley, moderated the student discussion. He highlighted some of the general themes, including how to address the spatially dispersed nature of current suburban commute trips and how to redefine and adapt public transportation to fit the suburban environment.

Kitae Jung, a Ph.D. student in the Transportation Engineering program at UC Berkeley, was the Grand Prize Winner of a \$1,000 Section scholarship for his paper entitled "Suburban Living: Public Transportation for Environmentally Sustainable and Healthy Communities". His paper highlighted the main suburban transportation challenge – how to serve origin-destination patterns that are scattered, or "many-to-many". Based on analysis of recent Bay Area Travel Survey and U.S. Census data, about 66 percent of BART commuters in Contra Costa County access their local stations by car, even though about half of County BART commuters live within three miles of them. He recommended short haul bus service that links suburban neighborhoods to BART stations as a potential solution to reducing auto usage.

Sahil Gulati, an undergraduate student in civil and environmental engineering at San Jose State University,

won the Undergraduate First Prize, a \$500 Section scholarship for his paper entitled, "Managing Suburbia." His policy suggestions included financial measures such as location efficient mortgages and allocation of transportation funds in proportion to population. He also recommended planning measures such as smart growth, transit-oriented development, and regional transportation planning that links city centers. Sahil accepted the undergraduate award for a second consecutive year with his proud parents in attendance.

Eric Anderson, a Master's student in urban and regional planning at San Jose State University, won the Graduate First Prize (also a \$500 Section Scholarship) for his paper "Policy Guidelines for Using Point and Line Geometries to Build a Greener Suburb". The main challenge identified was how to "densify" suburbs in order to better utilize the existing transit infrastructure. He compared San Francisco, which has hubs of commercial activity ("points"), to Fresno, a city where commercial activity has developed along arterial roadways ("lines"). He found that public transportation can more efficiently and effectively serve an area that is developed around "points" rather than "lines".

The three paper presentations were followed by a lively Q & A session between students and meeting attendees. For those interested in reading the winning papers, the Section has posted them online at: <http://www.sfbayite.org/students/paper-contest/index.html>. The page also includes links to past year paper topics and award-winning papers.

Rich Haygood, Section President, announced that five Bay Area students, including the three award recipients, would be offered paid transportation, hotel, and student registration at the upcoming District 6 meeting to be held August 17-20, 2008 in Anaheim, California.



*Andrew Kluter,  
Co-Scribe*



*Allen Huang,  
Co-Scribe*

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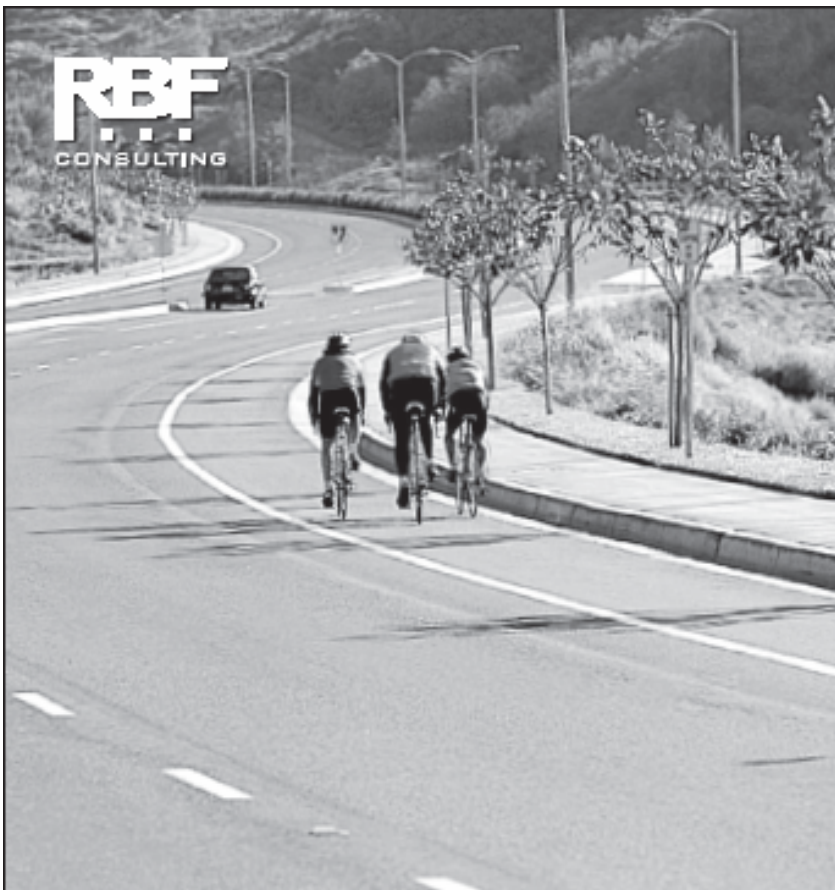
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