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YOUR NEW 2011-2012 OTEA BOARD OF DIRECTORS

From Left to Right: Angelo Lombardo - Secretary/Treasurer, Stuart Chai - Past President, Don Russell - President, David Riesland - Director, Don Goodell - Director and Faria Emamian - Vice President.

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Welcome to another year of OTEA, which began with our Spring Meeting. If you missed it, we had a great meeting. We had a good program, plus the opportunity to meet both formally and informally with other members of the traffic engineering profession. In my opinion, OTEA is the best value of any of the professional organizations that I belong to. Membership is inexpensive. The 2 meetings a year are filled with useful information and valuable contacts. It is an outstanding value.

The Board has been discussing a public outreach project over the last 6 months. After the presentation made by the Nebraska section about the problem of texting while driving, the Board would like to address this issue as our public outreach project. We will need your help to get the word out about the dangers of texting while driving. At this time we are considering a program like Nebraska’s in which we would have a video produced about the problem and possibly the consequences of texting while driving. We will need volunteers to go to the high schools and make the presentation, as well as members with connections at the high schools to schedule the presentations.

I encourage everyone to take full advantage of the OTEA web site at www.otea-ok.org. If you have not been to the site recently, give it a look. There is information about coming events and registration forms will be posted for the Fall and Spring Meetings. There is also information about traffic engineering topics and links to the ITE and MOVITE sites. While you are there, please check your member information and update it if necessary.

I appreciate your trust and support and look forward to the coming year as President.
The 2011 Spring meeting was held in northeastern Oklahoma’s Western Hills Guest Ranch. The golf tournament was held in the Sequoyah State Park Golf Course under cold and overcast conditions. It was like déjà vu as we struggled with the same climate the last time we met at this location. In spite of the last minute cancellations and the fact that half of the golf course was under water, we had nine teams with a combined thirty five players competed in the four-player scramble tournament. I wish we could get some of the rain we were getting then right now... Congratulations to the winning team of Greg Hietpas, Bodie Perkins, Steven Burke, Tammy Robinson & Brion Bannister, who scored a 12 under par 58. Second place went to Richard Johnson, Tim Bedinger, Don Goodell and Michael Knapik with an 8 under par 62. Two teams tied for third place with a 4 under par 66 (Steve Burke, Don Russell, Randy Barth and Les Stewart, and Darin Bjork, Darrell Hicks, Joyce Flatt, Marty Pinkley) Closest to the pin winners were Tim Miles (Hole No. 10), Richard Johnson (Hole No. 17) and Tim Bedinger (Hole No. 17). The longest drive prize went to Greg Hietpas.
In 2006, the OTEA Board of Directors approved the establishment of a scholarship program to recognize outstanding Oklahoma civil engineering students. Every year, students from the University of Oklahoma and Oklahoma State University have the opportunity to apply for one of the three $1,000 scholarships awarded on an annual basis.

This year, OTEA received two applications (both from O.U. students). Applications were reviewed by members of a selection committee headed by Harold Smart - Past President.

Recipients for 2011 are Trent Gilliam, a senior at the University of Oklahoma, and Carlos Rincon, a graduate student also at the University of Oklahoma. Winners were recognized during the 2011 Spring meeting banquet and the scholarships disbursed directly to their school to offset tuition costs.

The scholarship program was created to support full-time junior, senior or graduate level civil engineering students pursuing course work in the traffic/transportation field. In doing so OTEA hopes to encourage students to seriously consider rewarding careers in our profession. Applicants must be full time students enrolled at an Oklahoma University.
The Advent of the Flashing Yellow Arrow from the
Norman Perspective

By David Riesland, P.E.

For many years, concerns have persisted among traffic engineers regarding the circular green indications being used for permissive left-turns. Frustration has stemmed from the fact that many motorists seeing the circular green indication execute their left-turns under the false understanding that they have the right-of-way over oncoming traffic. A review of accident records of left-turn collisions at signalized intersections shows this to be the case time after time.

To alleviate these concerns, a number of alternative treatments have been tried over the years, but there has never been a comprehensive research effort to evaluate these displays. The National Cooperative Highway Research Program (NCHRP) launched Project 3-54 in the mid-1990’s to conduct the necessary definitive research to evaluate the wide variety of displays for permissive left-turns. In July of 2003, this research effort was completed and published as NCHRP Report 493.

NCHRP Report 493 concluded that the flashing yellow arrow was the best alternative to the circular green for permissive left-turns. The flashing yellow arrows provided a high level of understanding and correct response by left-turn drivers. In addition, the flashing yellow arrow also provides versatility in field applications and avoids the “yellow trap” associated with the green ball.

Following a thorough review of NCHRP Report 493, the Federal Highway Administration offered the flashing yellow arrow as a solution to permissive left-turn phasing by offering Interim Approval on March 20, 2006. Although flashing yellow arrows were not part of the 2003 Edition of the Manual on Uniform Traffic Control Devices, the Interim Approval granted an entity the ability to use flashing yellow arrows for permissive left-turns by submitting a written request to the Office of Transportation Operations. The flashing yellow arrows could be used in either permissive operation or in protected/permissive operation.

The 2009 Edition of the Manual on Uniform Traffic Control Devices (dated December 2009) offered both the flashing yellow arrow and the circular green as means of treating permissive left-turns. The distinction between the two has to do with the location of the signal head with respect to the left-turn lane. An exclusive head is to display a flashing yellow arrow while a shared head (a signal head shared with the adjacent through lane) is to display the circular green indication.

With this change from the Federal level, it is becoming clear that the flashing yellow arrow is on its way to becoming the preferred method of controlling permissive left-turn movements. With this in mind, the ODOT called a meeting for July 15, 2010, with representatives from Edmond, Norman, Oklahoma City, and Tulsa to discuss this emerging technology. ODOT was interested in gauging the feelings for the flashing yellow arrows at the local level. Following much discussion, there seemed to be some feeling of skepticism that the flashing yellow arrows would prove to be a safer method of treating permissive left-turns in the long run. Only Norman took the stance that an effort would be made to comply with the new technology.

Following the July meeting with ODOT, the City of Norman began an educational process with our City Council about the flashing yellow arrows and some of the opportunities that would be available to implement them citywide. Initial reaction from the Norman City Council was mixed with most of the concern revolving around finances during a downturn in the nation’s economy. The Norman City Council was assured that Federal funding would be sought to implement most, if not all, the eligible flashing yellow arrow installations within the City. The other issue

(Continued on page 12)
The good news is that 34 states now have laws banning texting while driving. The bad news is that Oklahoma is not one of them.

The past year, while a few bill-blocking Oklahoma legislators complained about infringing on the rights of drivers and enforceability, four more states passed laws banning this ultra-dangerous activity: Maine, Indiana, New Mexico and North Dakota. Even Arkansas has a law.

I urge Oklahomans to join with AAA in encouraging the Oklahoma Legislature to act to send a clear message to motorists that texting and driving is so risky, it’s against the law.

In the meantime, we all need to do more to encourage safe driving. Drivers texting on their phones may be safe from a ticket in Oklahoma, but the only way to be truly out of harm’s way is to hand up, stow all devices and remove distractions when behind the wheel.

On Thursday evening, April 28, 2011, OTEA members were privileged to view a presentation by Mr. Mark Lutjeharms of the LOCATE chapter of ITE. The title of the presentation was “Making a Difference” and it was designed for presentation to teenage drivers about the danger of impaired and distracted driving. At the conclusion of the meeting, OTEA was offered the presentation to modify in case there was interest in taking this idea to Oklahoma’s teen drivers. At its June meeting, the OTEA Board voted to create a public outreach committee. This committee is formed of Stuart Chai, Faria Emamian, Steve Hofener, Phyllis McElroy, David Riesland, and Sterling Sutton.

A portion of this committee met on July 7 at the TEC office in Oklahoma City. The presentation from LOCATE was divided among the committee members present. The work to make the presentation one for Oklahoma is nearly complete and a draft is available. The goal of the committee is to present the presentation at the Fall Meeting in Oklahoma City on October 21. At that time, we will be soliciting comments and looking for volunteers to champion the cause in their respective areas of the state. We look forward to presenting the draft presentation in October.
Key Congressional leaders are attacking Transportation Enhancements, Safe Routes to School, and Recreational trails and are taking steps to cut off dedicated federal funding for bicycling and walking.

House Transportation Chairman John Mica (R-FL) announced today that his transportation bill will eliminate dedicated funding for bicycling and walking, including Transportation Enhancements, Safe Routes to School and the Recreational Trails Program, and discourages states from choosing to spend their dollars on these activities that are “not in the federal interest.” Chairman Mica’s statement that these programs remain “eligible” for funding is worthless; without dedicated funding for these three programs, they are effectively eliminated.

Things on the Senate side are not much better. Senator James Inhofe (R-OK), the lead Republican negotiator on the transportation bill, declared that one of his TOP THREE priorities for the transportation bill is to eliminate ‘frivolous spending for bike trails.’ This is in direct conflict with Senator Barbara Boxer’s (D-CA) commitment to maintain dedicated funding for biking and walking. However, the Senate is working towards a bi-partisan solution, and Senator Inhofe’s comments mean funding for bicycle and pedestrian programs is at risk of total elimination.

Help protect Transportation Enhancements, Safe Routes to School and Recreational Trails. Contact your Members of Congress and tell them to reach out to Senators Inhofe, Boxer,

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of interest was an educational element for the motoring public concerning the new means of traffic control. In addition, the City of Norman Code of Ordinances would have to be amended to add the new flashing yellow arrow.

As an implementation package, City staff was able to outline the following for Council. The intersection of 12th Avenue SE with Lindsey Street was chosen as the pilot intersection to implement this new technology. After the pilot was in place for a few weeks, new traffic signals would be activated at the intersections of 36th Avenue NW with Rock Creek Road and Tecumseh Road with Healthplex Parkway/Journey Parkway that would also feature flashing yellow arrows. Then, two projects were identified to implement the remaining candidates. The City of Norman had a Federal project to implement LED signal indications and battery back-up units at the remaining locations in town not previously equipped with such. A change order was requested to upgrade eight intersections to flashing yellow arrows as part of that project. The final project was a Federal project, secured through ACOG, to address the remaining 50 intersections. Currently, the City of Norman has twelve intersections equipped with flashing yellow arrows. The following represents all the events that have transpired to date regarding the implementation of flashing yellow arrows in Norman to date:

- July 15, 2010: Met with ODOT to discuss the use of flashing yellow arrows.
- October 28, 2010: Met with the City of Norman City Council Transportation Committee to discuss the idea to implement the flashing yellow arrows.
- December 14, 2010: Met with the full Norman City Council to finalize plans to move forward with flashing yellow arrows.
- January 11, 2011: Presented a new Ordinance to the Norman City Council on the new flashing yellow arrows.
- January 14, 2011: Completed informational brochure to be mailed to the resident of Norman with utility bills.
- January 27, 2011: Activated the new flashing yellow arrows at the City’s pilot intersection of 12th Avenue SE and Lindsey Street. Installation occurred with City forces.
- February 15, 2011: Activated new traffic signals with flashing yellow arrows at 36th Avenue NW with Rock Creek Road and at Tecumseh Road with Healthplex Parkway/Journey Parkway.
- April 25, 2011: Completed an effort with the University of Oklahoma Gaylord College of Journalism and Mass Communication to produce information videos and interviews related to the new flashing yellow arrows. The videos were uploaded to the City’s website and run locally on Cable Channel 20.
- May 24, 2011: Upgraded the intersection of 24th Avenue NW with Mt. Williams Drive to flashing yellow arrows.
- June 10, 2011: Completed conversion to flashing yellow arrows at Flood/Tecumseh, Boyd/Berry, Boyd/Elm, and Boyd/Jenkins as part of the LED and battery back-up project.
- June 14, 2011: Completed conversion to flashing yellow arrows at 12th Avenue NE/Norman Bus Barn, Constitution/Jenkins, Classen/12th Avenue SE, and Boyd/12th Avenue SE as part of the LED and battery back-up project.

The initial response from the public following the implementation of the pilot intersection was largely negative. However, the vast majority of the negative comments dealt with the money that was being spent on this undertaking. After the first couple of weeks, the negative comments subsided and more positive comments began to be received. Now, there seems to be more of an interest to implement this technology in other areas. As for future plans, City staff plans to assemble before and after collision information to document what we feel is a safer operation. Stay tuned…
OTEA FALL MEETING - “What Works”

OCTOBER 21, 2011
OKLAHOMA CITY, OKLAHOMA
City of OKC Central Maintenance Facility
3738 SW 15th Street, Oklahoma City

TENTATIVE AGENDA

08:00 am to 8:30 am  Registration
08:30 am to 8:45 am  Welcome  Don Russell, P.E. - OTEA President
08:45 am to 9:45 am  ODOT’s Centennial Celebration  The Honorable Gary Ridley
                     Secretary of Transportation/ODOT Director
09:45 am to 10:30 am  Smart Work Zones - Design and Operation  Faria Emamian, P.E. - ODOT
                     Jerry Hietpas, Action Safety & Supply Co.
10:30 am to 10:45 am  Break
10:45 am to 11:30 am  Diverging Diamond Interchanges  Rashed T. Islam, P.E., HDR
11:30 am to 1:00 pm  LUNCH
01:00 pm to 02:00 pm  OTEA’s Make a Difference Campaign Update  David Riesland, P.E. - City of Norman
                     Steve Hofener, P.E. - TEC, Inc.
02:00 pm to 02:45 pm  Long Term Effectiveness of Speed Feedback Signs  Mike Rayburn, P.E. - City of Norman
02:45 pm to 03:00 pm  Break
03:00 pm to 04:00 pm  TBA
2011 OTEA GOLF TOURNAMENT WINNERS

1st Place - 10 Under Par 60
Bodie Perkins, Brion Bannister, Steven Burke, Greg Hietpas and Tammy Robinson
2011 OTEA GOLF TOURNAMENT
2011 OTEA GOLF TOURNAMENT
2011 OTEA GOLF TOURNAMENT
2011 OTEA MEETING IN PICTURES
The Senate Environment and Public Works (EPW) Committee has released a brief outline of its surface transportation reauthorization bill, which it is calling Moving Ahead for Progress in the 21st Century, MAP-21.

The overview says the bill will reauthorize federal-aid highway programs for two years at current spending levels (about $109 billion in total). The legislation consolidates 87 programs under SAFETEA-LU to about 30 and provides states flexibility to fund programs as they see fit.

It increases funding for the Transportation Infrastructure Finance and Innovation Act (TIFIA), a credit assistance program for transportation projects, from $122 million to $1 billion annually. It includes performance outcomes addressing safety, congestion and preservation and provisions to reduce project delivery costs and delays.

A bill has not yet been released. Sen. Boxer has said she planned to have the Committee consider a bill the week of July 25th. EPW has jurisdiction over SAFETEA-LU's highway programs.

A copy of the Senate EPW outline is posted at:


House Transportation and Infrastructure Committee Chairman John Mica released the Committee Republicans' six-year $230 billion transportation reauthorization proposal July 7th. His plan would consolidate or eliminate 70 programs, streamline project delivery, provide additional funding for TIFIA, and encourage states to create and capitalize state infrastructure banks. It would increase state flexibility in spending transportation funds but also include performance measures.

A House bill has not been released.

A copy of the House T&I Committee Republicans' plan is posted at:

Annual Meeting Recap
By: Angelo A. Lombardo, P.E.

(Continued from page 5)

Special thanks to the various companies who helped sponsor the Golf Tournament and to Marty Pinkley who once again worked the logistics and made all the arrangements! The following companies donated $100 each to sponsor the golf tournament: Advanced Work Zone, American Logo, Cobb Engineering, Gulf Industries, Hill & Smith, Inc., Holophane Lighting Co., Leotek, Midstate Traffic Control, Nippon Carbide, PEEK Traffic, Pinkley Sales Co., Shur-Tite Products, TESCO, TOMAR, Electronics, Traffic & Lighting Systems, Inc., Traffic Signals, Inc., Traffix Devices, Trinity Industries, Work Area Protection

The afternoon was capped off with a social time, hamburgers and hot dogs prepared by the “Pelco Products Chefs” - Bob Magness, Scott Talley and the rest of their gang.

Once again we enjoyed a tremendous level of support from many of our meeting sponsors. The generosity of the thirty five companies who participated turned into a direct contribution of almost $13,350. I continue to be amazed at their generosity toward, support of and dedication to this organization and our profession. It is through their support that we are able to keep registration fees well under the average for this type of meeting. Keep them in mind when you need equipment, materials or services. They are listed on the right side of this page. Platinum sponsors are those that contributed $500 or more, Gold Sponsors between $300 and $499, and Silver Sponsors between $150 and $299.

The meeting was attended by a record 135 people. The technical program included seven different presentations on a wide range of topics.

After President Stuart Chai’s opening remarks, Mr. David Riesland’s, City of Norman Assistant Traffic Engineer, made a presentation on the introduction of flashing yellow arrows (FYA) for control of left turn movements at signalized intersection. His presentation covered the various left turn phasing options in the 2009 Manual on Uniform Traffic Control Devices, the City’s plan for a citywide upgrade, the technical requirements associated with the change from the traditional five-section “dog house” to the four-section FYA head and presented the educational video developed by the Uni-

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The Minnesota winter can't stop them: Minneapolis receives the Gold-level Bicycle Friendly Community designation

The best biking cities of the East race toward Gold: Boston, New York City and Washington, D.C. all receive Silver-level designations

Washington, D.C. - May 2, 2011 - The League of American Bicyclists announced the latest round of Bicycle Friendly Community (BFC) designations today to kick off May as National Bike Month. This was one of the strongest groups of applicants we've seen with a lot of solid projects and programs from communities all across the country - from 1,200 people in Sisters, Ore. to more than 8 million in New York City. Twenty-one communities received awards, out of 45 new applicants. Minneapolis, Minn. earned a gold-level award, the highest award of this round. "We are thrilled to see Minneapolis reach a gold-level Bicycle Friendly Community designation," said Bill Nesper, director of the League's Bicycle Friendly America Program. "The city's great investments in bike lanes, bicycling safety education, and encouragement programs have paid off for its residents. In fact, communities across the country are now looking at Minneapolis as a model."

Under the leadership of Mayor R.T. Rybak, Minneapolis was first designated as silver-level BFC in May 2008. "We've made a deliberate effort to be one of the nation's top bicycling cities, and those investments mean we have more and more ways for people to commute and experience the city on two wheels," said Mayor Rybak. Thanks to the city's efforts, Minneapolis has doubled its number of bicycle commuters over the last nine years, placing it behind only Portland, Ore. among the largest cities in the U.S. -no small feat for a city with a notoriously harsh winter.

East Coast Cities Earn Silver Designations and Race to Gold

To date the Eastern United states has had very few silver-level Bicycle Friendly Communities and no gold-level BFCs. That's beginning to change. Today, the League of American Bicyclists gave Boston, New York City, and Washington, D.C. silver-level BFC designations. The cities are now competing to be the first to earn gold.

Since Mayor Thomas Menino launched Boston Bikes in 2007, the city has added 38 miles of facilities and has seen a spike in bicycle ridership. Bicycle commuting grew by 125 percent between 2005 and 2009 - and is at a level four times the national average. In 2010 alone, Boston installed 20 miles of bike lanes, incorporating numerous best-practices like cycle-tracks, bike boxes, colored bike lanes, buffered bike lanes, and special treatments over trolley tracks and at high-crash intersections. With 29 pre-existing miles of multi-use paths, the network now totals nearly 67 miles. All this helped Boston earn silver in its very first BFC application.

New York City has long been known for innovation and it is now applying that spirit to promoting bicycling. Under the Commissioner of the New York City Department of Transportation, Janette Sadik-Khan, the city has made great strides since their 2004 honorable mention and 2007 bronze award. "Moving the needle on bicycling in a city the size of New York City is nothing short of remarkable, and the city is one of the very few that has jumped two award levels," said Andy Clarke, president of the League of American Bicyclists. "With the imminent arrival of bike sharing and the continued expansion of the bikeway network, Gold is not far away." New York City developed an in-depth crash analysis, distributed 45,000 copies of the BikeSmart Guide to Cycling, and built an unprecedented amount of new and innovative bicycle facilities. In 2010, the NYCDOT installed more than 50 miles of bike infrastructure citywide, including protected on-street bicycle paths on First and Second Avenues, Columbus Avenue and Prospect Park West. The city has a nation-leading 500 miles of bike lanes.

Washington, D.C. first received a Bronze BFC award in 2004. Over the last seven years, it unveiled several signature projects including buffered bike lanes on Pennsylvania Avenue connecting the White House and the Capitol Building, a world-class bike parking facility, Bikestation, and the largest public bike sharing system in the country. These major projects are supported by an extensive bicycling education and encouragement program for children and adults. Washington now has the highest share of bicycle commuters of any major city on the East Coast.

To date, the League of American Bicyclists has received 452 applications and designated 179 Bicycle Friendly Communities in 44 states. The BFC program recognizes communities that promote bicycling and provides technical assistance in the form of a roadmap to help cities build great communities for bicycling. The League has identified projects, policies,

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On June 21, 2009, the Missouri DOT opened the first diverging diamond interchange in the western hemisphere at the intersection of Route 13 and 44 in Springfield, Missouri.

The project was built to alleviate congestion on the heavily traveled Kansas Expressway (Missouri Route 13) at 44 while providing a unique pedestrian/bicycle crossing down the middle of the bridge. The innovative design was chosen primarily for three reasons: timeliness, monetary savings, and safety. These goals became MoDOT's motto for the project - quicker, cheaper, and safer.

- Quicker: The DDI project was completed in six months instead of 12 to 18 months.

- Cheaper: The total cost of the DDI project was $3.2 million.

- Safer: Congestion-related crashes were reduced by 50% by eliminating left-turn conflicts and reducing bumper-to-bumper congestion. A pedestrian walkway runs down the middle of the bridge on Kansas Expressway, with crosswalks at the signals on each end of the bridge, resulting in a much safer way to cross the busy bridge.

The interchange has worked remarkably well since the project’s completion. Traffic has proven to move smoothly through the interchange and the significant backups of the past have been eliminated even during peak morning and afternoon rush hours and during major traffic-generating events.

More diverging diamond interchanges are being built in Missouri. The innovation is catching on, as many other state transportation departments are looking to replicate Missouri DOT’s innovative project and have begun designing and building diverging diamond interchanges. Additionally, Popular Science magazine named the interchange one of its 100 Best Innovations for 2009.

The first-in-the-USA design clearly works well. Its speedy construction, monetary savings, and safety features will benefit many communities across the country.

Source: American Association of State Highway and Transportation Officials
LEAGUE OF AMERICAN BICYCLISTS ANNOUNCES LATEST ROUND OF BICYCLE FRIENDLY DESIGNATIONS

(Continued from page 21)

programs and plans that most effectively improve cycling conditions and make up the foundation of a bicycle-friendly community. All of these bicycle-friendly elements are clearly described in the League's Bicycle Friendly America: The Blueprint. Communities are using these building blocks. Standout communities that moved from previous BFC Honorable Mentions to an award-level this round include: Des Moines, Iowa; Harrisonburg, Va.; Hilton Head Island, S.C.; Las Cruces, N.M.; Norman, Okla.; Northampton, Mass., and Tybee Island, Ga.

About the Bicycle Friendly America Program

The Bicycle Friendly Community, Bicycle Friendly State, Bicycle Friendly Business and Bicycle Friendly University programs are generously supported by program partners Bikes Belong and Trek Bicycle's One World, Two Wheels Campaign. To learn more about building a Bicycle Friendly America, visit http://www.bikeleague.org/programs/bicyclefriendlyamerica/

The full list of winners can be seen below. For more information, contact Meghan Cahill at 202.621.5452 or meghan@bikeleague.org.

2011 Spring Bicycle Friendly Community Winners

21 communities are awarded the BFC designation for the first time:

Silver Level
- Boston, Mass.
- Sisters, Ore.
- Hilton head Island, S.C.

Bronze level
- Athens & Clarke County, Ga.
- Cupertino, Calif.
- Des Moines, Iowa
- Eau Claire, Wis.
- Fresno, Calif.
- Harrisonburg, Va.
- City & County of Juneau, Alaska
- Kansas City, Mo.
- Keene, N.H.
- Las Cruces, N.M.
- Los Altos, Calif.
- Norman, Oklahoma
- Northampton, Mass.
- Raleigh, N.C.
- Sedona, Ariz.
- Somerville, Mass.
- Tybee Island, Ga.
- Wilmington, N.C

*Ten communities successfully renewed their designation and three moved up to higher designations

Gold
Minneapolis, Minn.*

Silver
- New York, N.Y.*
- Washington, D.C.

Bronze
- Beaverton, Ore.
- Carmel, Ind.
- Lexington & Fayette County, Ky.
- Mesa, Ariz.
- Roswell, Ga.
- Shawnee, Ks.
- South Sioux City, Neb.

Spring 2011 Honorable Mentions
- Apple Valley, Minn.
- Carson City, Nev.
- Chula Vista, Calif.
- Cottonwood, Ariz.
- Elmhurst, Ill.
- Fernandina Beach, Fla.
- Frederick, Md.
- Gahanna, Ohio
- Huntsville, Ala.
- Mankato / North Mankato, Minn.
- Onalaska, Wis.
- Peachtree City, Ga.
- Rosemount, Minn.
- Troy, Ohio
- Tuscaloosa, Ala.
- Warrenville, Ill.
- Wilmington, Del.
- South Windsor, Conn.
- Windsor, Calif.

The League of American Bicyclists promotes bicycling for fun, fitness and transportation, and works through advocacy and education for a bicycle-friendly America. The League represents the interests of America’s 57 million bicyclists, including its 300,000 members and affiliates. For more information or to support the League, visit www.bikeleague.org.
New traffic signals in Oklahoma City could improve travel time, safety

BY MICHAEL KIMBALL

Two projects involving traffic signals in Oklahoma City could cut commute times and help improve safety, officials said.

Drivers could spend fewer minutes on the road in Oklahoma City and perhaps avoid a call to an insurance adjuster thanks to two traffic signal projects.

The larger of the two projects is in the first year of a five-year implementation process. The city is spending $12 million to install an Intelligent Transportation Systems program to tie every traffic signal in the city together on a wireless network, said Dennis Haikin, the project's manager.

The money was originally provided in the city's 2007 bond issue to hard-wire signals at 300 intersections, but officials soon discovered they could wirelessly link all 734 intersections for the same price, Haikin said.

The system is designed to let controllers communicate with each signal on the network, helping to detect problems and traffic volumes faster, Haikin said.

The network should also help the city create more reliable transportation corridors to synchronize traffic signals on major thoroughfares, Haikin said. Officials have a modest goal of reducing every driver's trip by about 5 percent.

“If everybody is saving a couple of minutes per day, you can see how that adds up quickly. It accumulates,” Haikin said. “You're talking about time; you're talking about fuel consumption; you're talking about air pollution. It's going to be fantastic.”

The second project wrapped up in late 2010 and involves louvers placed on signals at certain intersections, city traffic engineer Stuart Chai said. It's intended to reduce accidents at intersections placed close to another intersection, where drivers could look at the wrong signal.

An example is where Memorial Road crosses the Lake Hefner Parkway, one of three high-profile intersections with the louvers, along with May Avenue and Interstate 44 and the Northwest Expressway and NW 63, Chai said. When drivers approached the intersection on Memorial and stopped at the first of two lights that were close to a second set, some would gaze at the second signal and react to the wrong green light.

The louvers now block the green light from being seen until a vehicle is close to it.

“You'll either see the red or the yellow, or if the light's green it will appear blank,” Chai said. “So you won't be seeing that green and maybe wrapping your mind around the wrong set of signals and entering the intersection when you shouldn't.”

Source: The Oklahoman, July 12, 2011
Annual Meeting Recap
By: Angelo A. Lombardo, P.E.

(Continued from page 20)

David Riesland discussing Flashing Yellow Arrow Displays for Protected / Permissive Left Turn Movements at Signalized Intersections

versity of Oklahoma for the City of Norman.

The second presentation of the morning was made by Glen Gottschalk who oversees roadway lighting for Oklahoma Gas and Electric Company in the Oklahoma City area. Glen’s presentation included a brief history of his company’s involvement and support of munici-

pal roadway lighting and the evolution of roadway lighting technology, including the emerging LED applications. Glen’s spoke positively and enthusiastically about the prospects and benefits of LED lighting and believes the time is right to implement pilot projects in Oklahoma.

The last presentation of the morning was made by Darin Bjork and Kent Kacir of Kimley-Horn who provided an over-view of the state of ITS technology. Their presentation provided a brief history of ITS technologies, practical applications in the municipal setting and future directions for the implementation of new projects.

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2011 OTEA MEETING IN PICTURES
City of Norman Fiber Optic and Traffic Management Project
By David Riesland, P.E.

Description of Project

Objective:
The City of Norman’s Traffic Division (Traffic) desired to expand the use of fiber optic cable to connect individual intersections and bring all signals back to a central location with a more powerful and sophisticated traffic signal management program. At the same time, the City’s Information Systems Division (IS) was pursuing a project to bring fiber optic cable to a number of remote facilities connecting them to a central site with a future vision of a redundant loop. This infrastructure was needed to meet growing bandwidth needs that current connection speeds could not support. This infrastructure would eliminate recurring fees that the City was paying for remote connections to share and access needed data.

Restrictions:
The cost of fiber optic cable was proving restrictive to the efforts of Traffic. The cost of the conduit necessary to carry the fiber optic cable was proving restrictive to the efforts of IS.

Collaboration:
The two groups sat down to discuss what each had to offer in terms of a fiber optic system to serve Norman and its citizens. At the table with one another, IS learned of the extensive network of conduits being utilized by Traffic to house its twisted-pair interconnect cable. During discussions, it became clear that Traffic’s conduits could, instead, carry fiber optic cable for this new project. This would supply IS with the conduits needed for their fiber optic cable and allow installation of more cable as a result. By replacing twisted-pair cable with fiber optic cable and connecting to each traffic signal along the conduit path; Traffic recognized a significant upgrade to fiber optics for its interconnection method. Both groups were able to realize their goals.

Results:
At about this same time, stimulus funding through the Federal government became available. The City was able to leverage this funding in order to install fiber optic cable on a corridor that did not have the benefit of having existing underground conduits in place. The combination of the City and the Stimulus projects has had a number of benefits to citizens and employees of the City. The City was able to install nearly 30 miles of fiber optic cable, valued as nearly 5 million dollars for roughly 1.5 million dollars.

Outcomes:
Without the collaboration, Traffic’s fiber optic build out would have consisted of only 5 intersections and less than 5 miles of fiber and IS would have been forced to decrease the fiber build out by 5 miles and not accomplished connectivity to at least one location and possibly two. Traffic was able to successfully launch the Centracs system signal managements program in November 2009.

Worthiness of Project for Award
The completion of these two projects has clearly demonstrated to us within the City of Norman the benefits of working together and sharing resources toward a common goal. Through the launching of the Centracs program, we have come to realize that this type of collaboration may be the exception rather than the rule. Personnel assigned by Econolite to work on the City of Norman project were amazed at how the Traffic and IS groups were working together rather than each designing separate systems. This type of collaboration may not be commonplace across the country, but the City of Norman has shown that it can work...
Annual Meeting Recap
By: Angelo A. Lombardo, P.E.

(Continued from page 25)

The afternoon session began with a presentation by Doug Tennant of Jacobs Engineering on the Oklahoma City Multimodal Hub study. Doug’s presentation addressed site selection criteria, described the various rail services that would be served along with a description of how the hub would work with other multimodal elements like OKC’s Downtown Street Car circulator, commercial bus and taxi services, public bus transit,
Kenneth B. Morris, P.E., PTOE, recently retired after a 31 year career in the traffic and transportation engineering field. The MOVITE Board of Direction has unanimously voted to recognize Ken as a Distinguished Member with the recognition announced on September 30 at the 2010 Annual MOVITE Meeting held in Oklahoma City, OK.

Ken states on his LinkedIn page, “Some of my early goals were to finish my Masters Degree and become a registered professional engineer.” Ken received his B.S. in Civil Engineering from the University of Oklahoma in 1979 and his M.S. in Civil Engineering from O.U. in 1983. He is a registered professional engineer in the states of Oklahoma, Washington, Arkansas and Ohio. Ken is certified as a Professional Traffic Operations Engineer (PTOE) by the Transportation Professional Certification Board, Inc.

Ken has over 30 years of experience in Civil Engineering primarily in the area of traffic engineering and transportation planning. From 1980 to 1983, Ken worked for the Association of Central Oklahoma Governments (ACOG) in Oklahoma City (OK) as a transportation planner. From 1983 to 1985, Ken worked for the Puget Sound Regional Council of Governments (PSCOG) in Seattle (WA) as a transportation systems analyst. From 1985 to 1988, Ken worked for the City of Kent (WA) as a transportation planner.

Ken further states in his LinkedIn profile, “My next goal was to lead and manage a large group of transportation personnel to make our transportation system safer and more efficient.” In 1988, Ken returned to Oklahoma to work as the Chief Traffic Engineer for Oklahoma City (OK). During his tenure with Oklahoma City, Ken helped to develop the first Municipal Area Projects (MAPS) program. “At the City of Oklahoma City, I had 75 people working for me under five different specific areas (planning, engineering, design, maintenance and administration). We were able to fulfill many of my goals to improve our transportation systems.”

From mid-1996 to his recent retirement, Ken served as the Managing Director and the Infrastructure Group Manager for The Benham Companies in Oklahoma City (OK). Ken states on his LinkedIn page, “I am in-charge of 50 people at Benham performing consulting and design work for a top ENR 500 company. Every day we work on designs to improve our transportation system and to improve the quality of life for many individuals.” During his time with The Benham Companies, Ken served as consultant to the Oklahoma Turnpike Authority, managing several multi-million dollar projects and was Program Manager for the $750 million Urban Corridor Continuation Program (UCCP)

ITE Contributions

Ken has been a long time member of the Institute of Transportation Engineers having joined ITE in 1985. Ken holds the membership grade of Fellow. Ken served on the Missouri Valley Section of the ITE (MOVITE) Board of Direction from 1994 through 2000. His service included a 3-year term as Director, followed by the offices of Secretary/Treasurer and Vice-President before serving as President in 1999. Ken also served as the MOVITE Representative on the ITE District Board of Direction in 1999 and as District Treasurer in 2000. He continued to serve as the de-facto District Treasurer well into 2001 when the official treasurer was unable to fulfill his duties.

MOVITE celebrated its 50th Anniversary as a Section of ITE in 2001. Ken wrote these reflections about his experiences as a MOVITE President.

““There are four accomplishments that I am proud to have taken part in establishing during my term as President. The first was changing the dues collection to be done by ITE national. The second accomplishment was conducting the first Traffic Bowl. The third accomplishment was holding a PTOE refresher training class in conjunction with the Annual Meeting. The fourth accomplishment was designating MOVITE as the Official Journal of the Institute of Transportation Engineers, primary source of transportation technical publications in the nations.”

(Continued on page 34)
Annual Meeting Recap

By: Angelo A. Lombardo, P.E.

(Continued from page 28)

etc. He also presented some of the preliminary design concepts of the hub facility which he described as a future iconic image of Oklahoma City.

Next on the agenda was ODOT’s Linda Koenig who presented her agency’s long term transportation plan. She described the consensus building process use with the various stakeholders in the development of a long term vision of Oklahoma Transportation system.

The last session of the afternoon was a panel discussion of new requirements and compliance dates outlined in the 2009 Manual on Uniform Traffic Control Devices. The session was moderated by Don Russell and included presentations by Mark Brown, City of Tulsa Traffic Operations Engineer, who discussed the Part 2 dealing with signs; James Montgomery, ODOT Engineering Manager, who discussed Part 3 dealing with pavement markings, and Angelo Lombardo, City of Norman Traffic Engineer, who discussed Part 4 dealing with Traffic Signals. Each presenter highlighted the most relevant changes in the new manual and answered a variety of questions from the audience.

Thursday activities were wrapped-up with the traditional banquet, the presentation of the annual OTEA scholarships and a presentation by Mark Lutjeharms on Nebraska’s LOCATE “Chapter Make a Difference Campaign”. Mark began his presentation with an explanation of how their Chapter undertook a project to raise awareness among teenage drivers of the danger of distracted driving. Their program, which was recognized by Nebraska’s Governor in 2010, has reached thousands of high school students in the Omaha area. Chapter members take turns speaking to high school student crowds and presenting facts about the consequences of driving while talking or texting on a cell phone. Mark’s presentation has already moved many OTEA members to want to make a difference in our state. He was grateful enough to leave us a copy of the presentation which an OTEA ad-hoc committee, led by David Riesland and Steve Hofener, had begun to tailor to our state’s needs. This committee plans to present the Oklahoma version of the distracted driver presentation during our upcoming fall meeting. At that time we will be asking for volunteers as we develop a list of facilitators and a strategy to spread the word.

(Continued on page 32)
and Congressman Mica to urge them to continue funding for these important bicycling and walking programs.

Need some good facts to bolster your argument? Read on:

Not in the federal interest? Biking and walking make up 12 percent of all trips in the US – even as funding for biking and walking projects only accounts for 1.5% of the federal transportation budget. That is more than 4 billion bicycle trips and 40 billion walking trips a year, including trips to work, school, shopping and for recreation and tourism.

Frivolous? Two-thirds of all pedestrian deaths are on federally funded highways. One-third of children’s traffic deaths happen when children are walking or bicycling and are struck by cars. Bicycling and walking programs build sidewalks, crosswalks and bikeways—improving accessibility and saving lives.

The Facts

- Biking and walking are important forms of transportation, and funding for bicycle and pedestrian improvements is a very efficient use of federal transportation dollars. Portland, OR built 300 miles of bike lanes and trails for the cost of one mile of highway.

- These projects create jobs and build local economies. Building bicycle and pedestrian infrastructure creates 46% more jobs than building road-only projects per million dollars spent. Cities that invest in bicycle and pedestrian projects turn downtowns into destina-

- Eliminating the 1.5% of transportation funding spent on bike/ped would have no meaningful impact on the federal budget, but instead, decreases transportation options for American families in a time of rising gas prices and an uncertain economy.

Bicycling and walking are a critical part of a safe and equitable transportation system. A federal transportation bill must continue dedicated funding for bicycling and walking.
The Business meeting was held on Friday morning with reports given on the organization’s finances, work zone safety training and MOVITE section activities. The results of the election were announced and the new board introduced.

For 2011-2012, the organization will be led by President-Elect Don Russell, President of Russell Engineering Company, Past President Stuart Chai, OKC Chief Traffic Engineer, Vice President, Faria Emamian, ODOT Assistant Chief Traffic Engineer, Director Tammy Robinson, Oklahoma Turnpike Authority Construction Engineer, Director David Riesland, City of Norman Assistant Traffic Engineer, and Director Don Goodell, Pelco Structural Regional Sales Manager.

Finally, Marty Pinkley presented the results of the golf tournament and thank the many sponsors who made the event a great success.

Angelo Lombardo recognized the many meeting sponsors whose contributions allowed the meeting to remain affordable for most of us. The business meeting was adjourned around 10:30 a.m.

Special thanks to Stuart Chai and the rest of the Board for leading OTEA during this past year. Also a special thank you to Phyllis McElroy for her hard work behind the scenes, including her handling the meeting registration table, preparation of Board meeting minutes.

Thanks to all who attended and for making our annual gathering a very successful, entertaining and informative meeting! See you in Oklahoma City on October 21, 2011 for our Fall meeting. Stay cool and be safe.

Yours truly,

Angelo
Norman found it to be an enormous cost benefit, as well as time, maintenance and future development advantages as well. The City of Norman has proudly developed the beginnings of an incredible system that will ultimately benefit all of our citizens and in hard economic times has done so by being very frugal with available resources.

Moving forward, there are additional opportunities for IS to continue to expand the citywide network to reach areas that could not be reached with the initial projects as well as new facilities that come on-line. From a Traffic standpoint, there is significant work to be done to continue to make sure that field controllers are compatible with the Centracs program. Strategic planning is needed to make sure future fiber corridors are identified allowing new signals to be brought into the Centracs system as the opportunities to do so become apparent in the future. All in all, though, the project was a tremendous success for both Divisions as well as for all of the citizens of Norman.

Perhaps the best feature of Centracs is that it provides alerts when certain field conditions happen such as an intersection going into flash. Centracs sends an e-mail and/or a text message to whomever the City designates when a signal goes into flash. This allows us to get technicians into the field more quickly to respond to these types of events. We no longer have to rely on law enforcement or a citizen to call in to report to us that a signal is in flash. This feature allows us to cut the response times significantly saving taxpayer funds for salaries, fuel, etc. For each condition for which alerts are desired, the City has the ability to designate who will receive the alert and in what format the alert will be delivered.

By working together, both the IS and Traffic groups accomplished much more than they could have on their own. The ultimate build out of the two projects was far superior to what each group envisioned as each project was conceived. For that reason, the collaboration between these two diverse groups has resulted in a highly successful project in the area of Transportation Operations. The result is something that the City and its citizens will benefit from for years to come.
plishment was holding the first fall planning retreat for MOVITE officers which has now become an annual meeting for the orientation of the incoming Board of Direction.”

Ken went on to say, “The major benefit of being a MOVITE member is being able to meet twice a year with fellow traffic engineers and discuss what is happening in the traffic engineering profession, new innovations, similar problems that we encounter and similarly discussing solutions to those problems.”

Other Professional Activities

Ken is a member of the Oklahoma City Chamber of Commerce Transportation Committee. Ken is a member of the American Society of Civil Engineers (ASCE). He is a Past President of Oklahoma Section of ASCE, a Past President of the Oklahoma City Branch of ASCE, and is an ASCE Key Alert Member. Ken is a member of the American Public Works Association (APWA).

7th Person to be Receive MOVITE Distinguished Member Recognition

Ken is being recognized as a MOVITE Distinguished Member because Ken has not just had a great project, as he has had many of those. And it is not because he had a great year, as he has had over 30 great years in the profession. It is because Ken is an example of the best of the profession and a person who has unselfishly given back to the profession through his contributions to ITE and MOVITE.

Todd Butler, MOVITE Past President (2004), who served with Ken on the MOVITE Board when Ken was President, states: “Ken has always been proactive in transportation planning, safety and management and has exhibited his knowledge and skills throughout his career. His management skills were also evident during his tenure on the MOVITE Board.”

Past Recipients of MOVITE Distinguished Member Recognition

2003 - Earl E. Newman
2004 - Steven D. Hofener
2005 - Edward J. Mulcahy
2006 - Garry W. Metcalf
2007 - James V. Dickinson
2008 - None
2009 - David E. Woosley

### 2011 OTEA SPRING MEETING FINANCES

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| NET PROFIT             | **$7,465.41** |

* Includes $3,376.00 in membership dues
**MEMBER NEWS**

**LUIS LOPEZ JOINS THE PELCO TEAM AS THE NATIONAL SALES MANAGER OF TRAFFIC**

Pelco Products, Inc. is pleased to announce the addition of Luis Lopez as National Sales Manager for all traffic related products. He brings over 20 years traffic sales experience and extensive product knowledge that will benefit Pelco’s customers. Mr. Lopez will office in Texas, where he is conveniently situated near Pelco’s manufacturing facilities and good travel access to customers.

Pelco’s customers will benefit from the work ethic, excitement and enthusiasm that he brings to the workplace. His professional motto “pleasure in the job, puts perfection in the work” is evident of his passion for his career. Mr. Lopez is excited about expanding Pelco’s national presence, building on the strong working relationships with their existing customers and introducing the new, high-quality and innovative traffic solutions Pelco has to offer currently, and in the future.

“Luis is an excellent addition to our team,” stated Steve Parduhn, Vice President of Pelco Products, Inc. “His exceptional communication skills and natural ability to build relationships, will allow our customers the customer service experience possible. I have no doubt that our customers will easily relate to him.”

**OTEA WELCOMES THE FOLLOWING NEW MEMBERS**

Delane Arrington - City of McAlester  
Darin Bjork - Kimley-Horn Associates  
Cecil Brown - Hill & Smith, Inc.  
Erica Bunvar - Cobb Engineering Company  
Steven Burke - Action Safety & Supply Company  
Zach Burkey - Pavement Maintenance Supply, Inc.  
Robert Conrad - Conrad Sales  
C. Rich Cramer - Hubbell Power Systems  
Shayne Currin - Potters Industries  
Gary Derbyshart - G&G Technology Corporation  
Maggie Dorrell - Holophane Lighting Company  
Clint Gilliam - Student (University of Oklahoma)  
Glen Gilmore - City of McAlester  
Michael Knapik - CP&Y  
Gary Lallo - Hill & Smith, Inc.  
David Laughlin - City of McAlester  
Mark Lutjeharms - Schemmer  
Ken McBride - Pavement Maintenance Supply, Inc.  
Marti McCall - Centerline Supply  
Richard McCubbin - City of Oklahoma City  
Sagar Medisetty - City of Lawton  
Tim Miles - Wilson & Company, Inc.  
Michael Mock - SafetyPro, LLC  
Chris Murdock - GSI Highway Products  
Bodie Perkins - DOW / Poly-Carb Inc.  
Carlos Rincon - Student (University of Oklahoma)  
Brian Shamburger - Kimley-Horn and Associates  
Mike Spayd - Garver, LLC  
Wade Summer - Tesco  
Controls, Inc.  
Matthew Warren - ODOT
## OTEA Membership Data Form

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New Members and Renewals Send Check for $25 per Year and mail to:

**OTEA**
c/o Angelo Lombardo
4405 Trophy Drive
Norman, OK 73072