As population growth and land development continues, more vehicles are put on today’s roadway infrastructure, which is creating additional stress on our already congested roadway system. To accommodate the additional demand for roadway capacity, which equates to more vehicles on the roadways, existing roadways are being expanded and new roadways are being constructed. The additional traffic also results in an increase in noise levels from roadway traffic. As transportation engineers, we need to incorporate measures to help protect the general public from the noise impacts generated by growing traffic volumes into our development and roadway projects.

In 1972, the Noise Control Act was established as a national policy to promote an environment free from noise that endangers the health and welfare of the people. As part of the enactment of the Noise Control Act of 1972, the Federal Highway Administration (FHWA) developed a computer program called STAMINA/OPTIMA. This program was a tool used to aid in calculating highway traffic noise in compliance with policies and procedures under FHWA regulations. STAMINA was the tool used for predicting highway noise levels and OPTIMA was utilized for evaluating noise barriers. Input parameters used by the programs included traffic volumes, vehicle speeds, truck mix, number of lanes, distance to receptors, and several other factors. Developed in the 1970’s, STAMINA/OPTIMA was difficult to use because both its input and output files had to be entered alphanumerically, rather than through a graphical interface. The user was required to represent roadways, terrain, and receptor locations as numbers in tables, using substantial engineering judgment. It was challenging to accurately model highway traffic noise using STAMINA/OPTIMA, if the relationship between roadways, terrain, and receptor locations was complex.

Since the development of STAMINA/OPTIMA, significant advancements have been made in the methodology and technology for predicting highway traffic noise and evaluating noise barriers. In March 1998, FHWA released the Traffic Noise Model (TNM). TNM was developed to improve the accuracy, ease the process of modeling highway traffic noise and evaluating noise barriers. However, TNM uses the same general input parameters, such as traffic volume, vehicle speed, and vehicle type, as STAMINA/OPTIMA. Some components of the TNM model, which STAMINA/OPTIMA did not have, resulted in improvements in highway traffic noise analysis. These improvements included:

- More versatility in modeling of vehicle types, (i.e., automobiles, medium trucks, heavy trucks, buses, and motorcycles), as well as user-defined vehicles.
- Modeling of the effects of different pavement types.
- Modeling of the effects of grades on roadways.
- Modeling of vehicles accelerating away from the various traffic-control devices (i.e., stop sign, traffic signal, toll booth, and on-ramp start points).
- Noise attenuation over/through rows of buildings and dense vegetation.
- Graphical input of roadway, terrain, and receptor locations. This allows the user to more accurately represent terrain in the study area.
- A graphically interactive noise barrier design capability.

Highway traffic noise is a combination of the noises produced by the tires, engines, and exhaust. Tire noise is generated by the interface between tires and pavement. Traffic from tire noise on new asphalt, or on special low noise pavement is noticeably quieter than on older, worn pavement. New pavement contains voids/pockets, which provide venting at the surface of the road, eliminating the entrapment of air between the tire and pavement resulting in low noise. However, over time, this effect is reduced, voids/pockets become filled,
A Message from the President

Jeffrey Dirk

It is difficult for me to believe that a year has passed and that this is the last President’s Message that I will share with the Section membership. The year has seen a number of significant accomplishments as a result of the dedicated efforts of the Executive Board, Committee Chairs, Chapter Boards and others who have volunteered their time to keep the Section and its Chapters active. At the Executive Board organizational meeting in January, the Board set goals of: 1) implementing the elements of the Section’s Strategic Plan; 2) maintaining and mentoring our younger members; and 3) continuing to deliver services to our members that retain and increase our membership base. In order to advance these goals, a balanced budget was enacted by the Executive Board that included a reallocation of monies to fund specific programs related to membership, Student Chapters and Young Professional Group activities. In addition, Past President John Mirabito was appointed to serve as the Section’s Strategic Plan Administrator. John will be undertaking a year-end review of the action items that are included as a part of the Strategic Plan and will report on the Section’s effectiveness in advancing these items and areas where additional effort is required. Like all strategic plans, the Section’s Strategic Plan is a ‘living’ document that is meant to be refined and updated as conditions warrant while retaining the core values of the NEITE Mission Statement.

The Section hosted a number of successful meetings over the year commencing with our organizational meeting in Barre, Vermont in January in conjunction with the Vermont Chapter. The Vermont Chapter has been working successfully with VTrans over the past several years to assist in the development of rules and guidelines for the preparation of traffic impact studies for private developments. In addition, the Chapter has been supporting the University of Vermont in the development of their Transportation Research Center and hosted a meeting at the center in the Spring. The Connecticut Chapter hosted the Section Board in March at the Manchester Country Club and prepared an informative program centered on pedestrian mobility. This feature drew professionals from various fields to discuss a topic which most encounter on a daily basis as we design and operate our transportation system. In June, the Section was hosted by the Maine and New Hampshire Chapters in York, Maine. The June meeting, besides featuring a great venue, weather and seafood, provided members with information on the design and operation of modern roundabouts from the perspective of the Federal Highway Administration and the ITE roundabout subcommittee.

In September, the Section hosted the Northeastern District Board in conjunction with the Massachusetts Chapter. The Massachusetts Chapter coordinated a well attended training session on the use of the VISSIM computer modeling software, as well as technical sessions and a dinner program featuring a presentation on MassHighway’s safety program and transportation infrastructure projects. The Rhode Island Chapter hosted the Section Board in November, our second annual joint meeting with the Chapter, at which attendees were provided a synopsis of the state of the transportation infrastructure needs and funding requirements by the new Commissioner of RIDOT. In addition, the Rhode Island Chapter meeting featured the Section’s first Past Presidents Meeting where the Section honored its Past Presidents. Of course the year would not be complete without the Section’s Annual Meeting in December. This event continues to be a success due to the efforts of a number of individuals, most notably Sue and Bill McNamara.

As many of you are aware, the Section is home to a number of Student Chapters whose activities continue to be a point of pride for the Section. The UMass Amherst Student Chapter once again stands out as an example of the Section’s goal to encourage the active participation of students in ITE at all levels. The UMass Amherst Student Chapter hosts a series of events and activities over the year including their annual Technical Day which promotes interaction between students and professionals. Student Chapter members attend ITE events and affiliated meetings and represent the Section at ITE conferences and associated meetings. Their efforts have been recognized at all levels within ITE including awards for student papers and Chapter activities. The District and Section have established priorities to fund student activities including providing grant monies for Student Chapter programs.

The Section Board will be awarding grant monies to Student Chapters in December that are designed to encourage participation by students in ITE activities. In addition, the Section continues to award two student scholarships through the Desjardins Scholarship Fund.

Next year the Section will face a number of challenges as we confront the economic conditions which have impacted all of us on a business and personal level. I have been informed by ITE that the national economy has had a very pronounced impact on its ability to fund certain programs and activities in the upcoming year. As a result, they have been forced to cut or reduce funding for programs in next year’s budget, one of which is the student reception at ITE headquarters during the annual TRB meeting in Washington, D.C. ITE is asking for donations from both individuals and corporations of any amount to help continue this important student outreach program. As companies look for ways to reduce costs, attendance at meetings and events, sponsorships and budgets for professional memberships are likely to be reduced.

In order to continue the Section’s core goals of delivering quality programs and services to its members and promoting the professional practice of Traffic Engineering and Transportation Planning, it will be critical that we develop meetings and activities that reinforce the value of membership in ITE and participation in Section and Chapter events and activities.

In closing, I would like to thank all of you for the opportunity to serve as your Section President over the past year. I have had the opportunity to work with a great group of volunteers who labor in a number of countless ways which may not be readily apparent but are the reason that the Section and Chapters continue to provide successful meetings and events. NEITE is a volunteer organization and is dependent on the active participation of members at all levels. The Section has developed a policy with regard to the rotation of nominees for the Junior Director position between states in order to provide diverse representation on the Section Board and to increase participation at the Section level. My participation in NEITE has been, and continues to be, a rewarding experience, and I would encourage each of you to become involved and participate in the Section and your local State or Student Chapter.
NEITE Chronicle Update

The roll out of our electronic distribution of the Chronicle was a great success, with several members approaching me to reiterate their support of electronic communication between NEITE and its members. Over the past few months, we’ve also been coordinating more frequently with the other sections of the Northeastern District to be sure that District information is passed on to the broader membership. Please see page 10 for information on the upcoming District 1 annual conference being held in 2009 in Saratoga Springs. To accommodate the New England Section and our Chronicle schedule, the deadline for submitting abstracts has been extended to January 1, 2009.

This will be my last issue as editor of the Chronicle. Beginning with the March issue, Andy ArsenaULT from Jacobs Engineering will be taking over the role. Please take a moment to think about how you can support Andy over the next year and keep those articles and updates coming. From the Chronicle staff, we wish everyone a Happy Holidays and Happy, Healthy New Year.

New Secretary/Treasure

The ITE Northeastern District is happy to announce that Gary Hebert, PE, PTOE has been elected to the ITE Northeastern District Executive Board as the next Secretary/Treasurer. Gary is currently a Vice President at Fay, Spofford & Thorndike in Boston, MA.

VHB’s contributing staff:

Laura Castelli  Quan Tat
Elsa Chan  Tom Wholley
Jorge Quinones

Useful Links

Institute of Transportation Engineers
http://www.ite.org

American Society of Civil Engineers
http://www.asce.org

New Hampshire Chapter
http://www.ascenh.org

Vermont Section Chapter
http://sections.asce.org/vermont

Maine Section Chapter
http://www.mainesece.org/main.htm

Connecticut Section
http://www.csce.org/

Urban Land Institute
http://www.uli.org

The American Planning Association
Northern New England Chapter
http://www.nnecapa.org

Massachusetts Chapter
http://www.massapa.org

Connecticut Chapter
http://www.ccape.org

Rhode Island Chapter
http://www.rhodeislandapa.org

As always, please do not hesitate to contact the Chronicle if you have any thoughts or suggestions, or if you would like to submit an article for the upcoming issue.
NEITE Annual Awards

David J. DeBaie, NEITE Awards Committee Chair

Committee Members
The 2008 NEITE Awards Committee was comprised of Kim Hazarvartian (NH); Kevin Hooper (ME); Sudhir Murthy (MA); Kevin Johnson (RI); and Paul Smith (CT); and chaired by David DeBaie who also voted as the Vermont representative. The Committee’s guidelines identify that upon selection by the President, the Chairman appoints a committee including a member from each state who will serve 3 year terms.

Process
The guidelines speak to timing of the effort, the voting role of the chair in the event of a tie, and the chair reporting directly to the president. Otherwise the process is open. Chairmen have collected and passed down their notes, which suggest a tradition of nominations and subsequent selections. E-mail has facilitated the exchange of information among the committee and in fact has displaced the troublesome meetings-in-person. For the past several years suggestions were solicited from the membership via the NEITE website.

Recommendation
The awards committee recommends that the name of the Young Professionals Group Award be changed to the Young Professionals Award.

2008 Presentation
Presentations were made by NEITE president Jeffrey Dirk at the 2008 Annual Meeting on December 5th as follows:

NEITE 2008 Award Selections
• Senator Steven Baddour: Transportation Leadership Award
• Rod Emery, P.E., PTOE: Transportation Engineer of the Year Award
• Bill Mc Namara: Distinguished Service Award
• John Mirabito, Jr., P.E. PTOE: Distinguished Service Award
• Jon Slason, E.I.T.: Young Professional Group Award

Brief biographies and plaque texts of the 2008 Awards:

Transportation Leadership Award
Presented to:
Senator Steven A. Baddour
For leading the Massachusetts state legislature toward comprehensive transportation Reform: measuring system performance, streamlining project construction, and ensuring effective infrastructure maintenance.

Senator Steven A. Baddour was first elected to the Massachusetts Senate in January of 2002 after winning a decisive victory in a hotly contested special election. Since then, he has worked to generate reform, protect vital services, and safeguard the interests of his constituents in the First Essex District.

Steve’s work as a legislator is part of a longstanding commitment to advocacy and community service. As an Assistant Attorney General, he established a reputation for fighting to protect working people that he continues to foster as a Senator. On his first day at the State House, Steve broke ranks with legislative leadership to oppose a redistricting plan that would have split the Merrimack Valley and weakened its representation. Since then, he has been an independent leader with a record of supporting education reform and funding, protecting essential services for our most vulnerable citizens, reforming state government, and spending our tax dollars wisely.

During 2004, amidst one of the state’s most exciting and tumultuous years, Senator Baddour remained a consistent voice for working families and taxpayers. In addition to being named a Guardian of Small Business by the National Federation of Independent Businesses, Steve was awarded Legislator of the Year by the Massachusetts Municipal Association for his role in securing funding for cities and towns to repair and build roads. As Chairman of the Joint Committee on Transportation, Steve also routinely convened hearings to ensure that the taxpayers are protected during the remainder of Big Dig construction. As a result of his questioning, the project is more accountable to the public and cost recovery efforts are back on track.

Senator Baddour has always used his leadership role to safeguard the interests of taxpayers, including initiating one of the most comprehensive acts of reform in over a decade through a proposal to restructure the state’s transportation hierarchy that will save millions. His plan will help make the repair and construction of our roads, rail systems, and other modes of travel more efficient by drastically increasing coordination among agencies.

In 2008, Senator Baddour stood along with Senate President Therese Murray, Speaker Sal DiMasi and Governor Deval Patrick to announce major transportation reforms to be included in the Transportation Bond Bill focusing on cost-containment recommendations for project management and construction processes. The reforms address the use of police details and MBTA pensions and health benefits. They also establish a wide array of transparency measures to improve project management and construction processes and are a crucial first-step in handling the $20 billion transportation funding gap and changing how the Commonwealth’s transportation agencies do business.

Understanding that years of neglect and inadequate investment in the state’s capital assets and infrastructure have resulted in a backlog that has far exceeded available resources, Senator Baddour has also lead the effort to pass legislation to accelerate the repair and replacement of the state’s most structurally deficient bridges. The $3 billion bond bill establishes an eight-year plan to fix 250 to 300 Massachusetts bridges identified as being in urgent need of repair. The bill also provides for the ongoing maintenance of bridges and will reduce the number of structurally deficient bridges by 15 percent over the next eight years. Additionally, by starting projects now rather than waiting, the Commonwealth will save approximately $1.5 billion in inflation and deferred maintenance costs while creating new jobs for the economy.

Senator Baddour’s passionate advocacy stems from longstanding personal ties to the community. A life-long resident of Methuen, Steve attended Methuen public schools and received his B.A. from the University of Massachusetts and his J.D. from the Massachusetts School of Law. He lives with his wife, Ann, and two young daughters, Isabella and Victoria, in Methuen.

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The Transportation Engineer of the year awardee is a “not so recent” graduate of Northeastern University. His career is distinguished by technical prowess and entrepreneurial success. His mentoring generosity is acclaimed by the many he has worked with. He is ever-present for New England Section, he has presented many technical sessions at annual meetings, he has traveled to all of the chapter meetings and presented there as well. He has been an active participant on the technical committee on their various projects that have contributed significantly to the technical knowledge, understanding and proficiency of all members of the section, his accessibility seems unlimited. His innovations advanced the inventory of traffic signals utilizing a laptop before anyone used them. His endorsement of roundabouts preceded almost everyone’s.

His career started with Edwards and Kelcey working in New Jersey near his hometown conducting traffic studies, origin-destination surveys, and preparing intersection project reports on the TOPICS program. He worked with leaders in the filed of traffic engineering with people such as Walter Kraft. He migrated to Boston and continued to work with Edwards and Kelcey and people like Walter Freeman.

He started a traffic engineering firm, Highway Traffic and Signal Design (HTSD) which was very successful in completing projects for public and private concerns. He personally hand-picked his staff to help build one of the most respected traffic engineering firms in the northeast. Those project successes were largely due to the well earned confidence that the clients and permitting authorities had in HTSD. The success of the firm can also be measured in the continued success of those who worked at HTSD.
and the pavement is smoothed, eliminating the efficient venting of air between the tire and pavement. Additionally, tire noise is typically louder on wet pavement than dry pavement.

Trucks are one of the more dominate noise sources on the highways. Even though truck tire noise is not the dominating source, it is still considered annoying at a distance. Truck noise is often more noticeable at night, when there are lower background sound levels. With low background sound to mask the trucks, noise appears louder during the night. In actuality, noise produced by a passing truck is the same during both daytime and nighttime periods. As a result, truck volumes are extremely important for the noise analysis.

Highway geometry also plays a role in highway noise. Steep grades increase traffic noise levels, as they cause motor vehicle engines to work harder. There are other factors that affect the loudness of traffic noise, such as distance, terrain, vegetation, and natural and man-made obstacles. Highway traffic noise is typically not an issue for homes located greater than 500 feet from heavily traveled roadways.

Generally the loudness of traffic noise increases with traffic volumes. If traffic volume increases from 200 vehicles per hour to 2,000 vehicles per hour, the sound level would be perceived as sound twice as loud. Additionally, loudness of traffic noise increases with higher speeds. Similarly, if the speed of a vehicle increases from 30 miles per hour to 65 miles per hour, the sound levels would be perceived as twice as loud. Truck percentage in the traffic volume also has an effect on sound levels. One truck traveling at 55 miles per hour would sound as loud as 10 automobiles traveling at the same speed. Therefore, a roadway with lower volumes, but higher truck percentages can have sound levels greater than a roadway with higher volumes and lower truck percentages.

The highest sound levels typically occur just before the peak commuting periods when traffic volume is heavy and vehicle speeds are at or near posted speed limits. Sound levels are typically lower during peak commuting periods since the resulting congestion leads to reduced travel speeds.

**Noise Reduction Strategies**

Impacts from highway traffic noise can be reduced by implementing strategic land use control during highway planning, or as part of the highway’s design. Many of these highways were originally constructed through undeveloped lands where no sensitive receptors existed. Once new homes built adjacent to existing highways, complaints about highway noise increased. Since many existing highways are still bordered by vacant land use, control of future developments can help prevent traffic noise problems in these areas.

Highway noise reduction strategies should be developed during the planning stages of highway projects. A noise study can be conducted early in the planning stages of highway improvement projects. A noise study would determine if any noise impacts would result due to the highway improvement project. The noise study would establish existing ambient noise levels of a highway by measuring sound levels. Existing noise measurements would also be used to calibrate the computer modeling, such as TNM. Then, noise levels from proposed highway projects are calculated using TNM. The future results are compared to the noise impact criteria. If the predicted noise levels are above the noise criteria, then the noise analysis would examine abatement measures to reduce these adverse noise impacts.

Construction of a level highway with gradual slopes can be an effective noise reduction strategy. Elimination of steep inclines helps to reduce traffic noise because vehicle engines would not have to work as hard, particularly with respect to truck engines. New roadways can be located away from noise-sensitive areas, such as schools, hospitals, and residential areas. New roads can also be located in undeveloped areas where noise impacts would be negligible. Traffic restrictions can sometimes reduce noise problems as well. For example, trucks can be prohibited from certain streets and roads, or they can be permitted to use certain streets and roads only during daylight hours. Traffic lights can be changed to smooth out the flow of traffic and to eliminate the need for frequent stops and starts. Speed limits can be reduced if additional conditions can be met.

**Potential Mitigation Measures**

When design noise reduction strategies cannot be implemented, potential noise abatement measures may be considered. These measures include:

- Creating buffer zones
- Constructing noise barriers
- Planting vegetation
- Installing noise insulation in buildings

Buffer zones are undeveloped open spaces which border a highway. The creation of a buffer zone is similar to implementing land use control. Buffer zones are created when land adjacent to the highway is secured so that future sensitive receptors cannot be constructed close to the highway. This prevents the possibility of constructing developments that would otherwise experience an excessive noise level from adjacent highway traffic. However, because of the large amount of land that must be reserved.
NEITE Chapter Updates

Northeastern University Student Chapter
This is the first report since the chapter’s former advisor, Haris Koutsopoulos, left Northeastern in Fall, 2007 in order to take a chaired faculty position at the Royal Institute of Technology in Stockholm, Sweden. I have assumed the responsibility as advisor.

We increased our membership with some new undergraduate and graduate students. We now have about 12 active members and about 20 other students who sometimes participate.

This fall, the Chapter took responsibility for Boston’s annual bicycle counting program, on a volunteer basis. The City did its first counts in 2007, performed by a private traffic counting contractor, but facing a tight budget and desire to expand the number of counting locations, when the City asked us for volunteer counters, we offered to take over the program. We selected 23 count locations in consultation with the City, developed counting forms suitable for untrained volunteer counters, recruited counting volunteers, did counts, selected summary measures for reporting, and compiled the counts. (Compilation isn’t quite complete at this moment.) Because of startup complications, only 17 locations were counted this fall. So far, this work has involved four working meetings in the computer lab to develop forms and prepare reports. In this first year, there has been a lot of initial work that we expect to be able to benefit from in future years.

We had two meetings in which the main event was a speaker:
- Jeffrey Dirk, on “What Does a Transportation Engineer Do,” with an overview of the interesting work he and his company does.
- James Barnack, a member of NU-ITE, on Transportation in the Netherlands, based on what he’d learned during a month-long summer program there. (James originally prepared the presentation for his co-op job employer, Jacobs Edwards & Kelsey; thank you for putting him up to this, Rod.) Commenting on the presentation was Hans Voerknecht, international coordinator of the Dutch Bicycle Council.

Activities planned for the coming year include:
- visit to the MBTA control center
- field trip of bike facilities in Cambridge, MA
- field trip to either New York or Montreal together with the students who will be participating in the summer 2009 Netherlands program
- meetings for student research presentations

We also plan to participate in the winter research symposium and in UMass Amherst’s ITE student chapter Professional Day.

Connecticut Chapter
The Connecticut Chapter of ITE recently held a joint meeting with WTS. The program revolved around “Green transportation” and was well received by our 96 attendees. The program included the following sessions; Walkable Commuter Rail in CT, Green Highways and Incorporating Wildlife Corridors into Transportation. Due to the success of this program, we are planning on making this an annual event and are beginning to plan a Fall 2009 joint meeting with WTS.

ITE Connecticut is also in the planning stages of a joint meeting with the ITS-Connecticut and a mid-January date is targeted. Possible meeting venues include the University of Hartford, Glastonbury Country Club, and the Hawthorne Inn, among others. Topics being discussed include software training (synchro), 511 Traveler information in CT, or the state of infrastructure funding. No additional details are available at this time.

Membership update: As of November 2008, the CT ITE Chapter had 119 paid members. Our 2009 Dues will remain at $10 and our dues request will go out in January with the ITE/ITS meeting registration.

Maine Chapter
The Maine Chapter of ITE held its Fall meeting at the MaineDOT training facility in Fairfield on October 22nd. Over twenty-five members attended the lunch and meeting that featured a presentation of “Maine’s Design Exception Process and Review Team” by Jeff McEwen from Maine’s FHWA office and the ITE webinar on “Economic Impacts of Access Management.”

We continue to work with MaineDOT in drafting a traffic engineering guidance book to help clarify what MaineDOT wants for consistency purposes in the areas of trip generation, impact studies and signal design.

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NEITE Annual Awards
(continued from page 5)

Since the days of HTSD, he returned to Edwards and Kelcey and has remained there since its merger with Jacobs where he is the Director of Transportation Engineering. Currently, he is directing the multi-million dollar transportation infrastructure project for Harvard University.

He is one of the first recipients of the PTOE and a recognized traffic expert throughout the country. He is also well known for his unselfishness and willingness to help mentor younger staff. He’s one of the few people in our industry who everybody know by his first name; Rod. It’s my honor to recognize Mr. Rodney Emery as the 2008 Transportation Engineer of the Year recipient for the NE Chapter.

Distinguished Service Co - Awards

Presented to: William P. McNamara
For many years of outstanding service to the transportation and traffic engineering profession and continued contribution to the New England section

The 2008 New England Section ITE co-recipient of the Distinguished Service Award is an individual who is well known to everyone at this Annual Meeting. He began his professional career in the traffic sector at the City of Providence Traffic Division in 1964.

In the summer of 1966, with two years of distinguished municipal service under his belt, he moved to the newly organized firm of Traffic Engineering & Sales. His career started to take off, in part due to his internal drive and his outgoing personality. He joined ITE in the mid 1970’s, and immediately became an active participant in the New England Section. After 25 years of service to TESI, he believed there was another way in which he could leave a lasting mark on our profession. In 1991, he started his own firm here in Rhode Island with the catchy and original name, Ocean State Signal Company.

This Distinguished Service Award recipient has been the NEITE Annual Meeting Chairman for more than 30 years, and has faithfully served this Section as Chairman of the Industrial Support Committee and coordinator of the Section’s Chronicle mailing list for more than 20 years.

Congratulations to our co-recipient of the 2008 Distinguished Service Award, Mr. William P. McNamara.

Presented to:
John R. Mirabito, Jr., PE, PTOE
For outstanding service to the transportation and traffic engineering profession and contributions to the New England section conceiving the NEITE strategic plan

The other 2008 Distinguished Service Award is for a graduate of Clarkson University with a BSME in 1987. His professional career began with the Massachusetts Highway Department’s Traffic Engineering Department in Boston. In 1992, he joined Fay, Spofford & Thorndike where he worked until 2007, when he joined his current employer, BETA Group, Inc. as a Senior Project Engineer. He is a registered Professional Engineer in Massachusetts and Rhode Island and a PTOE.

Some highlights of his work include:
- MassHighway Statewide On-Call contracts to improve traffic signals and signing;
- Design of traffic signals for surface streets above the Central Artery/Tunnel, North Street to Congress Street, Boston, MA;
- Terminal Area Roadways, Logan International Airport, East Boston, MA;
- Arterial Traffic Signal Systems in Providence, RI.

This ITE Member serves on the Traffic Engineering and Traffic Safety Councils. At the Northeastern District level he was the Chair of the Finance Committee for the 2007 District Annual Meeting and is Chairing the Advance Planning Committee for the 2010 Annual Meeting. At the New England Section level, John’s has held many positions, including:
- Chair, Continuing Education Committee;
- Chair, Young Professionals Group;
- Member, Technical Committee;
- Director; Secretary; Vice President; President; and Immediate Past President.

As a member of the Massachusetts Chapter, he served as President. He has served ITE on so many levels and served the Section in so many ways. His concept of a New England Section Strategic Plan illustrates his efforts as he identified its benefits, got the involvement of the Board and others to look critically at the Section and then develop a plan for the future.

We are grateful and we honor John Mirabito with the Distinguished Service Award.

Young Professional Group Award

Presented to:
Jonathan L. Slason, EIT
For contributions to the New England section of ITE as Vermont chapter president and demonstrated professional achievement as an emerging transportation professional.

Jon Slason graduated from Rensselaer Polytechnic Institute in 2004 with bachelor of science degrees in Civil Engineering and Economics.

He joined Resource Systems Group in 2004 and has been involved in land use planning, transportation system operational analysis, traffic engineering, roadway and intersection design, Geographic Information Systems (GIS), and economic analysis.

Mr. Slason has obtained the Engineer-in-Training certification and more recent projects focused on projects combining transportation, land use, and economic development. Representative projects include:
- A series of Innovative Finance “White Papers” for the Chittenden County MPO in Burlington Vermont which explored innovative or alternative funding mechanisms, project delivery, intergovernmental arrangements, and design standards that can reduce the time and cost of implementing transportation infrastructure projects.
- Transportation Impact Fee Update for the Town of Williston Vermont - The study demonstrated the ‘rational nexus’ between proposed development and the transportation infrastructure necessary to accommodate the additional vehicles demanded by the development.
- US Route 2 Corridor Study through Williston, South Burlington and Burlington Vermont

Jon has been a member of ITE and has been active in the Vermont Chapter. In 2007 he assumed the role of President of the Chapter. He has been instrumental in maintaining the Chapter activities and in particular the recently instituted tradition of the January joint Section / Chapter meeting in Vermont. Jon has also done well to attract others as Vermont Chapter officers.
Chapter updates

(continued from page 7)

Vermont Chapter
The Vermont chapter plans to hold new officer elections in December or January. However, in the interim Evan Detrick has taken over as president since Jon Slason’s departure from Vermont. All other offices have remained as they were with Jenny Austin serving as treasurer and secretary, David Roberts as the member at large and Jon Kaplan as the VTTrans liason.

On October 28 we held our joint meeting with the NEITE in Berlin, VT. Topics of discussion included the US7 Shelburne Road followed by a robust question and answer session.

The Vermont chapter has also become more effective in collecting annual dues which will allow us to provide more activities in 2009 and beyond. Furthermore we are revamping the chapter web site and have posted an updated membership directory on the site.

UMass Amherst Student Chapter
Our Adopt-a-Highway initiative had continued to be a very successful service activity. The original contract with MassHighway stipulated that the chapter would participate in eight days of cleanup per year for two years. We are proud to report that the cleanup which took place in the month of November concluded the first year in our two year contract.

The chapter responded to the ITE Trip Generation Project for 2009. This project will examine trip and parking generation data for donut shops with a drive through window. The proposal was submitted in November and we should have a response in December.

We also hosted our first webinar November 12th. The webinar dealt with innovative pedestrian crossing treatments and was attended by 11 student chapter members.

Continuing Education in NEITE: We need your help

Joe Balskus, Committee Education Chair

After being involved with the Continuing Education the last 4 years with several successful training sessions spanning roundabout software analysis, to safe routes to school and work zones, we are looking for new training ideas from the membership!

Ideas for training in the past, which have not yet been offered, include MUTCD training, parking lot/facility design and FHWA sponsored courses.

Members, we need your feedback for the coming year for training, with fresh ideas that are hot and would draw significant interest and most importantly, serve you, the membership.

If you have ideas for training sessions that would benefit the membership the most and have a high interest level, whether half day, full day of training, please forward them to myself at jcbalskus@tighebond.com, current Committee Chair, or the incoming President, Mike Knodler at mknodler@ecs.umass.edu.

Thank you and happy holidays!
The Transportation Engineer’s Role in Highway Noise (continued from page 6)

sometimes be secured, creating buffer zones is often not possible. In that case, vegetation, if high and dense enough, can also decrease highway traffic noise. A 200-foot width of dense vegetation can reduce noise by 10 decibels, which cuts the loudness of traffic noise in half. It is often impractical to plant enough vegetation along a road to achieve such reductions. However, vegetation can be planted along highways to create psychological relief even though it does not substantially reduce highway traffic noise levels.

Noise barriers are the most common noise mitigation measure available to highway designers. Noise barriers may be constructed of earth berm, wood, metal, and concrete. Noise barriers will provide significant noise reduction once the line of sight between receptors and highway traffic is blocked. Earth berms have a natural appearance and are usually attractive. However, an earth berm can require quite a lot of land if it is very high. Other types of barriers take less space and are typically limited to 25 feet in height for structural and aesthetic reasons. Barriers must be high enough and long enough to block the view of a road. Noise barriers do very little in terms of noise abatement for homes located high on a hillside overlooking a road or multilevel buildings, which rise above the barrier. Openings or gaps in noise barriers reduce the effectiveness of the barrier. In some areas, homes are scattered too far apart to permit noise barriers to be built at a reasonable cost. When highway traffic noise levels in an impact assessment situation are determined to be high enough to require the consideration of highway noise barriers, there are policies require that the noise barrier pass certain feasibility and reasonability tests. These tests ascertain the constructability of noise barriers, the acceptability of their cost-benefit ratio, the impact of barriers on wildlife migration, the impact on road safety, and also whether the community desires them.

Conclusion

The Transportation Engineer’s role in highway noise is to strike a balance between improving transportation systems and the environment. As the United States continues to develop and traffic demands increase, transportation engineers must adapt policies to address noise impacts on the surrounding community. In many cases, limiting development or using natural barriers are not sufficient for noise mitigation. Noise barriers are needed to reduce potential noise impacts of highway projects. Most residents living near a noise barrier feel that highway noise barriers significantly reduce traffic noise and that the benefits outweigh disadvantages such as aesthetics and shading. While noise barriers do not eliminate all highway traffic noise, they do reduce it substantially and improve the quality of life for those who live adjacent to heavily traveled roadways.

ITE District 1 Annual Conference in Saratoga Springs

The conference technical program committee is currently accepting abstracts for presentations at 12 technical sessions. Should you have an interesting project or topic that addresses the variety of transportation challenges we regularly face today, we would welcome an opportunity to invite you to share your work with others in the profession.

If you are interested in presenting at the conference please send an email to kthompson@tvga.com including:

- your name and contact information
- brief bio
- proposed presentation title
- brief abstract/summary explaining your presentation concept or idea (we don’t expect to have final presentation packages at this time)

Abstract submission deadline has been extended to January 1, 2009. The committee will consider proposals and respond promptly to all applicants. Should you have any questions, please contact Kelly M. Thompson, P.E. at (716) 655-8842, ext. 2210 or by at kthompson@tvga.com.

NEITE Membership Summary

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Data compiled from spreadsheet received 11-25-08 from ITE HQ.
On Wednesday, June 4, 2008 the NEITE hosted the 9th Annual Thomas E. Desjardins Golf Tournament to benefit scholarships for college students in the field of transportation engineering. Once again our resolve and commitment to this worthwhile activity was tested due to the less than perfect weather but overall gave testament to our strong support for this scholarship fund and Tom’s memory.

The golf tournament netted a total profit of $3868.84 before the award of our two scholarships. This year our scholarship winners were Samuel Gregorio and Deanna Peabody, both from the University of Massachusetts at Amherst. Each was awarded a $1500 scholarship at our September meeting in Waltham. We would like to thank our hole sponsors and raffle prize suppliers for their continued support.

I would also like to recognize the help of Paul Nauyokas, for his help on collecting the fees for the tournament and Ken Petraglia for soliciting the scholarship applications.

We look forward to seeing everybody next year at our 10th anniversary golf tournament.

Thomas E. Desjardins Memorial Scholarship Fund
Rodney C. Emery, P.E., PTOE, Jacobs Engineering Group

NEITE Word Search
Elsa Chan, VHB

Arterials | Signals | Freeway | Highways | Merge
--- | --- | --- | --- | ---
Gap | Guardrails | Level of Service | Delay | Roundabouts
Capacity | Diverge | Queue | Speed | Free Flow
Upcoming Events

To see a list of all activities and news relating to the ITE visit www.ite.org/site/event.asp or www.neite.org for NEITE specific information.

December 16, 2008
NH Chapter Meeting
Concord, NH