The New England Chronicle

Winter 2015 Volume 55 Issue 1

THE OFFICIAL PUBLICATION FOR THE NEW ENGLAND SECTION OF THE INSTITUTE OF TRANSPORTATION ENGINEERS

UTILITY POLES AS A ROADSIDE HAZARD: THE INTERSECTION OF ROADWAY DESIGN AND TORT LIABILITY SUBMITTED BY: WILLIAM F. LYONS, JR., P.E., PTOE, AICP, ESQ. EDMUND BALDWIN

MASSDOT STATEWIDE FLASHING YELLOW ARROW IMPLEMENTATION PROGRAM SUBMITTED BY: JAMES M. DANILA, P.E., PTOE

The New England Chronicle



In This Issue:

A Message From the New England Section President2
New England Section Directory3
The Editor's Minutes4
Utility Poles as a Roadside Hazard5
Section Calendar7
MassDOT Statewide Flashing Yellow Arrow Implementation Program8
Quarterly Images9
The 2014 New England Section Awards10
Annual Meeting Images11
An Observational Evaluation of Safety Resulting from Driver Distraction 12
Some New/Old Faces in Some New Section Places14
Professional Services Directory
Committee, Chapter, and Student Chapter Updates
Employment Opportunities 17

NEITE's mission is to serve its members, the transportation profession, and the public by facilitating professional development and education, promoting the exchange of ideas, and enhancing the professional practice to provide safe efficient cost-effective and sustainable transportation solutions.



Dear NEITE Members:

It's 2015 and we've hit the ground on our skis! Our first New England Section Executive Board Meeting was held on January 21st at Mount Snow Ski Resort in West Dover, Vermont. That morning eleven of us took to the slopes, skiing and snowboarding on the well groomed, man-made snow in comfortable temperatures compared to past years. I would like to thank Jennifer Conley, P.E., PTOE and the Vermont Chapter for doing a wonderful job organizing this meeting. After the board meeting, over twenty members attended the technical sessions. The topics were diverse and included subjects on stormwater compliance for linear projects, Mount Snow Resort's Transportation Master Plan, and a discussion on the new organizational structure at the Vermont Agency of Transportation (VTrans).

Some Thanks Are In Order

I would like to give a heartfelt thank you to Past President Michelle Danila, P.E., PTOE for guiding us through a successful 2014. As the first President of the New England Section to have a newborn during her tenure, she was still able to preside over all but one board meeting and quickly filled the many vacancies within the Section's committee chair positions. Her organizational skills were needed, handling the agendas and issues efficiently to get us out of the board room on time! Michelle passed on some tips to me and I'm glad to have her help this year.

I would also like to thank Jeffrey R. Gomes, MCPPO who has served on the Section's Executive Board for three years, including service as Section Treasurer and Chair of the Program Committee. I hope Jeff will join us again soon and consider serving as a committee chair!

Reviewing the Executive Board Minutes

At the January Executive Board Meeting, the Board passed a budget for 2015 and briefly discussed the Section's goals, the 2015 calendar and vacant committee chair positions. The Section goals for 2015 will build on last year's goals, implementing the recently updated Strategic Plan and retaining and increasing Section membership.

A Message from the New England Section President

JOSEPH A. HALLISEY, P.E. Lead Civil/Traffic Engineer Parsons Brinkerhoff

I would like to welcome Dave J. DeBaie, P.E., PTOE of New Hampshire and John Q. Adams, P.E., PTOE of Maine to the Section's Executive Board as the 2015 Junior Directors. In addition, I would like to welcome the following new committee chairs:

- Kim Hazarvartian, Ph.D., P.E., PTOE | TEPP LLC | Awards Chair
- Ian A. McKinnon, E.I.T. | Tetra Tech | Membership Chair
- Michelle Danila, P.E., POE | Toole Design Group | Goals & Objectives Chair
- William F. Lyons Jr., P.E., PTOE | For Hill Infrastructure | Past Presidents Council Chair

A special thank you to Doug Prentiss who chaired the Awards Committee for many years and the previous committee chairs for all their effort in helping the Section!

Upcoming Events

Please try to attend these upcoming NEITE events:

- The University of Massachusetts Amherst Student Chapter will be holding their 16th Annual Technical Day together with the Student Symposium on March 26th in Amherst, MA.
- The next NEITE Section Board Meeting will be with the Connecticut Chapter on April 8th at the Manchester Country Club.
- The Northeastern District Annual Meeting will be held on May $13^{th} 15^{th}$ in Albany, New York.

Keep a look out for these event flyers!

I look forward to an exciting and successful new year for the Section while we continue to share transportation knowledge on the job, in the conference room, and during social hours. If you have any questions or suggestions, please feel free to contact me at hallisey@pbworld.com or 860.815.0269.

> Sincerely, Joseph Hallisey, P.E. New England Section President

New England Section Directory

Executive Board:

President – Joseph A. Hallisey, P.E. Parsons Brinckerhoff 500 Winding Brook Drive | Glastonbury, CT 06033 P: (860) 815.0269 | <u>Hallisey@pbworld.com</u>

Vice-President – Alan T. Cloutier, P.E., PTOE Fay, Spofford, and Thorndike, Inc. 5 Burlington Woods | Burlington, MA 01803 P: (781) 221.1000 | Acloutier@fstinc.com

Secretary – Rebecca L. Brown, P.E., PTOE The Engineering Corp, Inc. 65 Glenn Street | Lawrence, MA 01843 P: (978) 794.1792 | rbrown@theengineeringcorp.com

Treasurer – Nick M. Fomenko, P.E., PTOE

BETA Group, Inc. 1010 Wethersfield Ave, Suite 305 | Hartford, CT 06114 P: (860) 513.1503 | <u>nfomenko@BETA-inc.com</u>

Senior Director – Samuel W. Gregorio, P.E. The Engineering Corp, Inc. 65 Glenn Street | Lawrence, MA 01843 P: (978) 794.1792 | sgregorio@theengineeringcorp.com

Senior Director – Jason M. DeGray, P.E., PTOE Greenman-Pedersen, Inc. 181 Ballardvale Street, Suite 202 | Wilmington, MA 01887 P: (978) 570.2981 | jdegray@gpinet.com

Junior Director – David J. DeBaie, P.E., PTOE Stantec Consulting Services, Inc. 5 Dartmouth Drive, Suite 101 | Auburn, NH 03032 P: (802) 864.0223 | <u>ddebaie@stantec.com</u>

Junior Director – John Q. Adams, P.E., PTOE Milone & MacBroom, Inc. 100 Commercial Street, Suite 417 | Portland, ME 04101 P: (207) 541.9544 | jadams@mcmahonassociates.com

Immediate Past President – Michelle Danila, P.E., PTOE Toole Design Group, LLC 33 Broad Street, Suite 405 | Boston, MA 02109

P: (617) 619.9910 | mdanila@tooledesign.com

State Chapter Presidents:

Connecticut – Michael Morehouse, P.E. P: (860) 247.7200 | mmorehouse@fhiplan.com

Maine – John Q. Adams, P.E., PTOE P: (207) 541.9544 | johna@miloneandmacbroom.com

Massachusetts – Kenneth P. Cram, P.E., PTOE P: (781) 932.3201 | <u>kcram@baysideengineering.com</u>

New Hampshire – David Saladino, P.E. P: (802) 295.4999 | <u>David.Saladino@rsginc.com</u>

Rhode Island – Derek L. Hug, P.E., PTOE P: (401) 861.3070 | <u>dhug@fando.com</u>

Vermont – Jennifer Conley, P.E., PTOE P: 802.345.2321 | jconley@conleyassociates.com

Standing Committee Chairs:

Awards – Kim E. Hazarvartian, Ph.D., P.E., PTOE P: (603) 226.4013 | <u>keh@teppllc.com</u>

Charter/ByLaws – Kim E. Hazarvartian, Ph.D., P.E., PTOE P: (603) 226.4013 | keh@teppllc.com

Chronicle Editor – Samuel W. Gregorio, P.E. P: (978).794.1792 | sgregorio@theengineeringcorp.com

Chronicle Committee – Daniel M. Dulaski, Ph.D., P.E. P: (617) 373.7034 | <u>ddulaski@coe.neu.edu</u>

Continuing Education – Jason M. DeGray, P.E., PTOE P: (978) 570.2981 | jdegray@gpinet.com

Desjardins Scholarship – Fayssal J. Husseini, P.E., PTOE P: (857) 206.8756 | <u>fhusseini@Nitscheng.com</u>

Emerging Professionals – Alex T. Lovejoy, E.I.T. P: (617) 222.1980 | <u>alovejoy@MBTA.com</u>

Emerging Professionals – Michael W. Fenley, P.E., EVP SP P: (617) 452.6871 | fenleymw@cdmsmith.com

Goals/Objectives – Michelle Danila, P.E., PTOE P: (617) 619.9910 | mdanila@tooledesign.com

Historian – John P. Thompson, P.E. P: (203) 294.2035 | jpthompsonpe4@aol.com

Industrial Support – William P. McNamara P: (401) 231.6780 | <u>billmc@oceanstatesignal.com</u>

Legislative Liaison – Kien Y. Ho, P.E., PTOE P: (781) 255.1982 | kho@BETA-inc.com

Membership – Ian A. McKinnon, E.I.T. P: (508) 903.2052 | <u>Ian.McKinnon@tetratech.com</u>

Nominating – Kenneth J. Petraglia, P.E., PTOE P: (781) 255.1982 | <u>kpetraglia@BETA-inc.com</u>

Past Presidents Council – William F. Lyons, P.E., PTOE P: (877) 305.4163 wlyons@fhisllc.com

Program – Kevin W. Johnson, P.E., PTOE P: (401) 751.5360 | johnsonkw@cdmsmith.com

Public Relations – Open Position

Strategic Plan – Joseph C. Balskus, P.E., PTOE P: (860) 704.4760 | <u>icbalskus@tighebond.com</u>

Student Chapter Liaison – Steven M. Tupper, E.I.T. P: (508) 362.3828 | stevenmtupper@gmail.com

Technical – Thomas A. Errico, P.E. P: (207) 347.4354 | thomas.errico@tylin.com

Technical – Steven C. Findlen P: (508) 823.2245 | sfindlen@mcmahonassociates.com

Website – Ian A. McKinnon, E.I.T. P: (508) 903.2052 | Ian.McKinnon@tetratech.com

<u>Useful Links</u>:

Institute of Transportation Engineers: <u>http://www.ite.org</u>

ITE Northeastern District: <u>http://www.northeasternite.org</u>

ITE New England Section: http://www.neite.org

ITE Upstate New York Section: http://www.itenyupstate.org

ITE New York Metro Section: http://ite-metsection.org

Young Professionals in Transportation -Boston Chapter <u>http://www.yptboston.org/</u>

Boston Society of Civil Engineers: http://www.bsces.org

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

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

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

ASCE Maine Chapter: http://www.maineasce.org/maine

ASCE Connecticut Chapter: http://www.csce.org

ASCE Rhode Island Chapter: http://riasce.org

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

MA Association of Consultant Planners: http://www.macponline.org

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

APA Massachusetts Chapter: http://www.massapa.org

APA Connecticut Chapter: http://www.ccapa.org

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

On the Cover: Heavy snow falling on the MBTA Blue Line as a train leaves Wonderland Station in Revere, MA. Photo Source: Alex T. Lovejoy, E.I.T.

On the Back Cover: Early snow on the Kangamangus Highway (Route 112) in Bartlett, New Hampshire. Photo Source: Kevin R. Dandrade, P.E., PTOE

The New England Chronicle

Find The New England Section Online

The New England Section of the Institute of Transportation Engineers is tuning into social media. In order to provide quick updates on events and notices, past and present, the Section is now on Facebook, Twitter, and LinkedIn.



As of this issue of the *Chronicle*, our Facebook group has 70 "Likes". Here you can get updates on future and current events, and even see photos from many of our past events. Feel free to post any discussions or comments on our wall.

Our LinkedIn group is also growing fast. We already have more than 300 members. Search for "New England Section of the Institute of Transportation Engineers" or follow the link from the NEITE webpage and join the group. We will be posting info on future events here as well. While we can't post photos here, there are areas for discussions, notices, and even job postings.

Finally, the New England Section is now on Twitter with 50 followers and growing every day. Please find your quick hit updates by following @NewEngland_ITE

Please remember to receive all your updates, news, and Section information at the New England Section website:





For those members of the New England Section that would like to be included on the Section email list for Google Groups, please contact Samuel W. Gregorio, P.E. at TEC, Inc. at <u>sgregorio@theengineeringcorp.com</u>.





Looking Forward into 2015

I am happy to report that the *New England Chronicle* was successful once again in meeting its goal to release four issues during the 2014 calendar year. A month into 2015, this year looks to be no different. The goal of the *New England Chronicle* staff here at TEC, Inc. is to provide the New England Section of ITE a handheld interface between its 600 members, the various State Chapters, our Section's Executive Board, and ITE as a whole.

To make 2015 as successful as the previous years, I would also like to take this opportunity to welcome all within the New England Section to contribute their experiences, opportunities, challenges, and innovative strategies to the *New England Chronicle*; to share knowledge within the many aspects of transportation engineering and planning.

A Look Back at the 2014 New England Section

As always, our Winter Edition of the *New England Chronicle* highlights those New England Section members who were recipients of our Section Awards. Pages 10 and 11 of the *Chronicle* provide information on our four award recipients as well as the plaque text engraved on each award. In addition, images of the 2014 New England Section Annual Meeting have been included. I hope you did not miss out this past December.

Articles

In this quarterly issue, the New England Chronicle features two condensed articles, including: Utility Poles as a Roadside Hazard shared by William F. Lyons, Jr., P.E., PTOE, Esq. and Ned Baldwin of Fort Hill Infrastructure Services, LLC and a look at the Massachusetts Department of Transportation (MassDOT) Statewide Flashing Yellow Arrow

The Editor's Minutes SAMUEL WHITE GREGORIO, P.E. Project Engineer

Project Engineer The Engineering Corp, Inc.

Implementation Program shared by Jim M. Danila, P.E., PTOE of MassDOT - Highway Division. In addition, Christina M. Dube, E.I.T., formerly of UMass Amherst, shares her research on distracted driving as part of our continued "Student Research Spotlight" series.

A Thank You to Our Sponsors

I would be remiss if I did not convey my thanks to all those New England companies and firms that have renewed their sponsorship of the New England Chronicle in our Section's Professional Services Directory. We were fortunate enough at the start of 2015 to welcome four new sponsoring firms to the Directory over the past month. The Chronicle will continue to reach out to the many New England companies and firms in hopes that we can assist in promoting the great engineers, planners, and vendors that make up our New England Section of the Institute of Transportation Engineers.

Contributions to the Section

I would again like to thank all contributors to the fourth and final issue of 2014. Behind the scenes, it takes many people across the Section's membership to put together the award winner newsletter publication of your New England Section. I hope you enjoy the last issue of the 2014 calendar year.

> Samuel White Gregorio, P.E. Chronicle Editor sgregorio@theengineeringcorp.com

Please remember to visit the New England Section website at <u>http://www.neite.org</u> and our updated Section Directory for information on the New England Section.

MBTA Commuter Rail Rolls into Gillette Stadium (Foxborough, Massachusetts) Photo Source: Alex T. Lovejoy, E.I.T.

Utility Poles as a Roadside Hazard: The Intersection of Roadway Design and Tort Liability

WILLIAM F. LYONS, JR., P.E., PTOE, AICP, ESQ. President Fort Hill Infrastructure Services, LLC

NED BALDWIN Project Manager Fort Hill Infrastructure Services, LLC

Executive Summary

In the United States, automobile use is extensive and pervasive. Vehicle accidents are such a common occurrence that they are considered an unavoidable part of normal activity. As a result, there is a legal duty to provide safe roadways that are clear of undue hazards. Transportation policy and design standards reflect this by recommending the provision of a "clear zone" along the edge of the road. A clear zone is an "unobstructed, traversable roadside area that allows a driver to stop safely, or regain control of a vehicle that has left the roadway."1 Nonetheless, along many public roadways in New England and across the United States, above-ground utility infrastructure is located inappropriately close to vehicular traffic, creating a potential hazard. Impact with utility poles is a major category of vehicular accidents, including a large share of fatal crashes. As such, roadway jurisdictions and utility companies should share responsibility for the damages incurred from these collisions.

Legal Framework

Automobile accidents have been recognized by the courts as a "frequent and inevitable contingency of normal automobile use."² In addition, the courts have recognized the distinction between the reason a vehicle departed from normal traffic movement and the reason damage was suffered in a subsequent collision: "If a governmental body or private party creates a dangerous condition near a highway, the condition may be at least one cause of an injury."³ Therefore, a growing body of legal doctrine and policy guidance is aimed at reducing the impact of potential accidents though hazard avoidance and mitigation: "The century-old common-law duty has been construed to require that the areas adjacent to the road ... be kept safe and free from hazards." As such, "obstacles or devices capable of causing collisions resulting in injury or death should not be placed so close to a highway that a driver cannot stop before hitting them." 4

Within this framework, roadside hazards can be considered public nuisances and indicative of negligence. The government is "liable for public nuisances which endanger travelers"⁵ and has "a duty to maintain the roads in a safe condition, so as not to expose motorists to any undue hazards."⁶ Negligence occurs when reasonable care has not been used to avoid an expected hazard. Actions are measured against a standard of care which "may be a written set of instructions, a policy, a guideline, or the accepted normal practice."⁷ principles of roadway design. Therefore, for measuring reasonable care in avoidance of roadway hazards, AASHTO guidelines can be considered the standard of care.

AASHTO guidelines specify the need for a clear zone "beyond the edge of the traveled way, available for safe use by errant vehicles."⁸ Vertical obstructions should not be located within the clear zone. The width of the clear zone depends on traffic volume, design speed and roadway geometry. The minimum recommended clear zone is seven



Standard of Care

The American Association of State Highway and Transportation Officials (AASHTO) is the national body that develops the standards for customary and ordinary practice in roadway design. AASHTO standards have been incorporated into the design guidelines of many state departments of transportation, including the Massachusetts Department of Transportation's (MassDOTs) Project Development & Design Guide, and are referenced by the Federal Highway Administration (FHWA) as the guiding (7) feet. Roads with higher volumes and faster design speeds should feature wider clear zones. Slopes and curves also influence the size of the clear zone.

However, AASHTO recognizes that in urban environments right-of-ways are often constricted such that providing a full clear zone may not be practical. AASHTO recommends that in these circumstances there should still be an offset of at least 4

Continued on Page 6





The New England Section of the Institute of Transportation Engineers is hereby honored to present a *Certificate of Appreciation* to *Mr. Samuel White Gregorio, P.E.*

For his leadership, guidance and dedicated passion with the *New England Chronicle* and "Bringing Home the Hardware" for the <u>second straight year</u> (2013 and 2014) as the recipient of the ITE District and Section Newsletter Award for a circulation category of 500 or more.

With an astute staff of co-workers and support from his company, TEC, Inc., he continued the production of the quarterly *New England Chronicle* newsletter, from an already-winning publication to continue being the Section's medium of communication. This newsletter serves as a model for other sections to follow.

The New England Chronicle was recognized by the International Board of Direction of the Institute of Transportation Engineers at its annual meeting on August 13, 2014 at Seattle, Washington.

Since taking over from past editors in 2013, Sam built upon the fine *New England Chronicle* template that was already in place for our Section, enhanced upon the format, incorporated social media connections and references, added more graphics while continuing the electronic version of the newsletter. His hard work allowed our Section to compete with larger Section newsletters throughout the country for ITE's newsletter award. Timely and interesting articles were submitted from his co-workers and contacts.

Sam has been a member of the Section since 2009, and even though the *New England Chronicle* editorship has been his first leadership assignment on a committee or board, he has been recognized as an effective leader by getting elected to the Section Executive Board in 2013, while achieving national status for the Section.

It is my pleasure, on behalf of the Section, to present this *Certificate of Appreciation* to Samuel W. Gregorio, P.E.

Continued from Page 5

feet, with at least 6 feet on the outer side of a curve. In addition, since utility poles "can pose a substantial hazard", AASHTO states that "known utility pole hazardous locations should be avoided" and poles should be as far as possible from travel lanes.⁹

Existing Conditions

Throughout Massachusetts, electricity and telecommunication providers utilize roadside poles to support cables and related distribution equipment. These poles are placed with the concurrence of the local jurisdiction with authority over the right of way through a process called a "Grant of Location." Roadside poles are involved in numerous vehicular accidents and "far too many people...are being killed and injured each year in collisions with utility poles."10 Allowing these roadside hazards to be installed and maintained in close proximity to normal traffic flow contributes to property loss, injury and death. As such, some responsibility should rest upon the locality and the utility: "Where such hazards exist, the duty to maintain the roads in a safe condition means much more than merely an obligation to preserve the roads in their original condition. It includes the duty to make the roads safer."11

Conclusion

In Massachusetts and throughout the United States, unsafe roadway conditions exist due to the placement of utility poles within what should be an unobstructed roadside clear zone. Bodily injury and property damage suffered by people traveling the public roads is in part caused by the presence of the poles, yet under current practices the liability for compensation rests with the driver and his or her insurer. These public nuisances exist due to negligence on the part of the locality and the utility in taking reasonable care, and some liability should be assumed by them for the result.

References

- ¹ FHWA Safety Program website, <u>http://</u> safety.fhwa.dot.gov/roadway_dept/clear_zones/
- ² Larsen v. General Motors Corporation, 391 F.2d 495, United States Court of Appeals 8th Circuit, March 11, 1968.
- ³ The Law and Roadside Hazards, Insurance Institute for Highway Safety, Michie Company, 1974. §1-8, page 26.
- ⁴ The Law and Roadside Hazards, Insurance Institute for Highway Safety, Michie Company, 1974. §1-6, page 19.
- ⁵ Utilities and Roadside Safety, Transportation

Research Board, National Academy of Sciences, 2004; Page 34.

- ⁶ The Law and Roadside Hazards, Insurance Institute for Highway Safety, Michie Company, 1974. §1-6, page 19.
- ⁷ Utilities and Roadside Safety, Transportation Research Board, National Academy of Sciences, 2004; Page 33.
- ⁸ Roadside Design Guide, 3-1 The Clear Zone Concept, AASHTO, 2011
- ⁹ Roadside Design Guide, Chapter 10 Roadside Safety in Urban or Restricted Environments, AASHTO, 2011
- ¹⁰ Utilities and Roadside Safety, Transportation Research Board, National Academy of Sciences, 2004; Page 4.
- ¹¹ The Law and Roadside Hazards, Insurance Institute for Highway Safety, Michie Company, 1974. §1-6, page 20-21.

Sources

American Association of State Highway and Transportation Officials (AASHTO),

- Roadside Design Guide, 2011
- Strategic Highway Safety Plan, 2005
- A Policy on Geometric Design of Highways and Streets, 2004

Insurance Institute for Highway Safety, *The Law and Roadside Hazards*, 1974

Federal Highway Administration

- Highway/Utility Guide, Publication FHWA-SA-93-049, 1993
- Roadside Improvements for Local Roads
 and Streets, 1986

Massachusetts Highway Department, Project Development & Design Guide, 2006

Transportation Research Board of the National Academies,

- · Utilities and Roadside Safety, 2004
- Guidance for Implementation of the AASHTO Strategic Highway Safety Plan, 2004

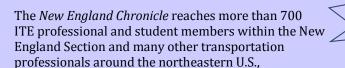
Ned Baldwin is a forensic engineering, urban planning, and real estate development consultant. He holds a Masters in Urban Planning from the University of Virginia and a MBA from Boston University. He is a Project Manager for Fort Hill Infrastructure Services LLC, a Boston based architecture and engineering consulting firm.

William F. Lyons Jr., Esq., P.E. is an attorney, a transportation engineer, and an expert witness. He holds a Juris Doctor from Suffolk University Law School, a Master of Transportation and Urban Systems from North Dakota State University, a Master of Strategic Studies from the US Army War College, and a Bachelor of Science in Electrical Engineering from Norwich University. He is the CEO of Fort Hill Companies.



Advertise Your Firm/Company and Sponsor the New England Chronicle Newsletter by being part of the **Professional Services Directory**

Why Sponsor and Place an Advertisement:



- Firms/Companies who advertise in the *Chronicle* can post job vopportunities in both the *Chronicle* and on the New England Section website,
- Firms/Companies who advertise in the *Chronicle* are highlighted with an business card size ad in both the *Chronicle* and on the New England Section website's home page and *Chronicle* page, and
- Advertisement / Sponsorships run for one (1) calendar year. That includes posting in the next four (4) *New England Chronicle* newsletters and one (1) year posting on the New England Section website.

How Do I Advertise?:

- The cost of a one year business card size advertisement in the *New England Chronicle's* Professional Services Directory is \$100 per year, **payable to** the New England Section of ITE.
- Business Card Size Advertisements should preferably be in PDF format.

Applications for the future June 1st to 30th, 2015 computer-based

exams of Professional Traffic Operations Engineer (PTOE) and Professional Transportation Planner (PTP) are due April 15, 2015.

Please note that applications received after the deadline will require an additional \$75 late fee to process the application in addition to the

application and examination fee that must accompany the

application. TPCB will try to accommodate late applications but there

is no guarantee they will be able to do so.

For a list of available exam cities, please visit:

http://castleworldwide.com/mainsite/ibtsites/default.aspx

• NOTE: NEITE Tax ID: 52-1326217

Send payment to: Ocean State Signal Co. Attn: Claire Choquette 27 Thurber Blvd Smithfield, RI 02917 Send Business Card Sized Ad to: Samuel W. Gregorio, P.E. Chronicle Editor sgregorio@theengineeringcorp.com

ROFESSIONAL

TRAFFIC OPERATIONS

PCE

PROFESSIONAL

PLANNER

lt May Be Time

to Renew Your

Ad!!

PTOE & PTP

Section Calendar

March 2015

UMass Amherst ITE Technical Day / Student Symposium March 26th, 2015 Campus Center Hotel

Amherst, Massachusetts

April 2015

Connecticut Chapter Meeting April 8th, 2015 Tentative: Manchester Country Club Manchester, Connecticut

Transportation Camp New England

April 11th, 2015 Massachusetts Institute of Technology Cambridge, Massachusetts

May 2015

Northeastern District Annual Meeting May 13th-15th, 2015 Albany Hilton Hotel Albany, New York

June 2015

Desjardins Memorial Golf Tournament June 3rd, 2015 Sandy Burr Country Club Wayland, Massachusetts

Please send all calendar announcements, including the name of event, the contact person, event location and date to the New England Section webmaster Ian A. McKinnon, E.I.T. and Chronicle Editor, Samuel Gregorio, P.E. at: <u>Ian.McKinnon@tetratech.com</u> and <u>sqreqorio@theengineeringcorp.com</u>

Just Over the Horizon

May 2015 Northeastern District Annual Meeting



MassDOT Statewide Flashing Yellow Arrow Implementation Program

JAMES M. DANILA, P.E., PTOE Assistant State Traffic Engineer Massachusetts Department of Transportation

Approximately 25 percent of all crashes that occur at traffic signals in Massachusetts have been attributed to left turning vehicles. Due to the angle of impact of collision, a crash that involves a left turning vehicle is more likely to cause injuries or fatalities. As a part of our goal to significantly reduce fatalities and injuries on our streets and highways, the Massachusetts Department of Transportation – Highway Division (MassDOT) has been examining different countermeasures to reduce the likelihood of left turn crashes at signalized intersections.

One potential contributing factor to left turn crashes is Protected-Permissive Left-Turn phasing (PPLT). PPLT is designed to give left turning vehicles a Steady Green Left Arrow for a period of time when opposing traffic is stopped – the <u>P</u>rotected portion of the phase – and is followed by a Steady Yellow Left Arrow. Following the Yellow Left Arrow, a Steady Green Circular indication is provided and left turning vehicles are required to yield to oncoming traffic in the <u>P</u>ermissive portion of the phase. Most drivers recognize this type of phasing when they see the following traffic signal:

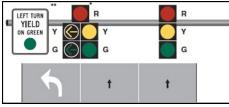


Figure 1: Part of MUTCD Figure 4D.11 (Page 472) - Typical Position and Arrangements of Shared Signal Faces for Protected/Permissive Mode Left-Turns

Source: 2009 Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)

Left turning crashes typically occur in this scenario during the Permissive phase; motor vehicle operators either forget or do not comprehend that a Steady Green Circular indication requires left-turns to yield to oncoming traffic. Over the past several years engineers have begun to add a supplemental sign, as shown in the figure, to reinforce this message, but these crashes continue to prevail.

An alternative to the traditional PPLT signal face is included in the latest edition of the *Manual for Uniform Traffic Control Devices for Streets and Highways (MUTCD)*, which was adopted in Massachusetts in January, 2012. This new signal face is referred to as a

Extensive research and implementation of FYA for Protected-Permissive Left-Turn phasing across the country has shown significant safety benefits. Studies have shown that, on average, left turn crashes are reduced by approximately 20 percent. Drivers typically find the FYA display to be self-explanatory and need no further instruction. However, drivers that do not understand the meaning of the



Flashing Yellow Arrow (FYA). Similar to the traditional PPLT phasing, the signal transitions from a Steady Green Left Arrow to a Steady Yellow Left Arrow. However, instead of providing a Steady Circular Green for the permissive phase, a Flashing Yellow Left Arrow is displayed to left turning vehicles:

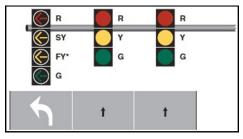


Figure 2: Part of MUTCD Figure 4D.12 (Page 473) - Typical Position and Arrangements of Separate Signal Faces with Flashing Yellow Arrow for Protected/Permissive Mode and Protected Only Mode Left Turns

Source: 2009 MUTCD

Flashing Yellow Left Arrow tend to make a safe maneuver, i.e. stopping and yielding to oncoming traffic, whereas left turning drivers that do not understand the meaning of the traditional Steady Circular Green often do just the opposite.

As a pilot project MassDOT installed a FYA signal at the intersection of Pittsfield Road (U.S. Route 20) and Holmes Road in Lenox, a location that operates PPLT phasing and had a history of a high number of left turn crashes. Completed in January, 2013, the intersection has seen a significant reduction in left turn crashes and the change has earned praise from the Lenox Police Department.

Based upon the national research and statistics and the successful pilot project in Lenox, MassDOT has begun to move forward with a systematic project that will convert all

Continued on Page 9



Continued from Page 8

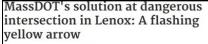
eligible traffic signal that operate with PPLT phasing from the traditional display to the FYA. This work will take place at over 350 State Highway traffic signals, covering 148 cities and towns across the Commonwealth.

Design work for the first stage of this project began in-house in 2013 with an inventory of approximately 1,400 traffic signals on the State Highway system. The first set of construction contracts were advertised in the fourth quarter of 2014 and will be awarded in early 2015. These contracts will cover existing traffic signals that do not require substantial changes to signal structures and require minor traffic signal controller cabinet and signal face modifications. Anticipated to be completed over two years, these contracts will retrofit nearly 75 percent of the eligible locations.

Some signals will be upgraded to FYA in the interim through previously designed capital and maintenance projects. The second State Highway signal to see this type of upgrade is the intersection of Great Road (MA Route 119) and King Street (MA Route 110) in Littleton. This location was the topic of a MassDOT blog post in December, 2014 (http://blog.mass.gov/transportation/massdot-highway/massdot-new-traffic-signal-

technology/) and the subject of numerous other press articles within the Commonwealth.

The remaining locations, which require more detailed design, will be designed by on-call consultants and are expected to be advertised in 2015 and 2016, with construction expected to take place in 2016 and 2017. Construction costs for all advertised FYA retrofit projects will be split 90/10 between the FHWA and



By Clarence Fanto, Special to The Eagle POSTED: 12/12/2012 12:02:28 PM EST UPDATED: 12/13/2012 02:28:17 PM EST

LENOX — The state Department of Transportation's solution to the accident-prone Pittsfield Rox Holmes Road intersection — a new traffic signal system that includes a flashing yellow left-turn arrow to alert southbound drivers on Routes 7 and 20 to oncoming northbound motorists — is drawine reactions of cautions optimism from local dificials.

The MassDOT remedy was outlined at a meeting on Wednesday with District 1 Director Peter Nile at the regional headquarters off Route 7A attended by Town Manager Gregory Federspiel and Lenox Police Chief Stephen O'Brien.



Figure 3: Online Newspaper Post (12/13/2012) Highlighting MassDOT Implementation of FYA in Lenox, Massachusetts

Source: Berkshire Eagle

MassDOT using Highway Safety Improvement Program (HSIP) funding. Upon completion of all work, crash data at signalized intersections will be reevaluated to determine the crash reduction benefits in Massachusetts.

MassDOT will continue to work closely with media outlets for local outreach and education efforts during construction. Staff is also available to offer technical assistance to cities and towns doing retrofit work on municipally-owned signals.

James M. Danila, P.E., PTOE is the Assistant State Traffic Engineer in the Highway Division of the Massachusetts Department of Transportation. Jim received his B.S. in Civil Engineering with a Minor in Environmental Science from Lafayette College in Easton, Pennsylvania. He is currently an active member of ITE.

Would You Like to Contribute to the New England Chronicle?



Would you like to contribute to an award winning New England Chronicle newsletter? The New England Chronicle's Editor Staff at TEC, Inc. is seeking members (both professionals and students) who are interested to write both short and feature articles for publication in the upcoming New England Chronicle issues. Both short and feature articles should be about technical topics, professional matters, innovative projects, and cutting-edge solutions that affect transportation engineering and planning.

Typically short article would consist of 1,000 to 2,500 words and feature articles would consist of 2,000 to 4,000 words. Each article should include a head shot and bio of all participating authors. Further details for each article submission can be given upon request.

For more information on how you can become a *New England Chronicle* contributor contact the *New England Chronicle* Editor: Samuel W. Gregorio, P.E. at <u>sgregorio@theengineeringcorp.com</u>.

Quarterly Images

Learning Stormwater Techniques

Marla Keene of Vanasse Hangen Brustlin, Inc. discusses stormwater compliance and the regulatory environment at the Winter Vermont Chapter Meeting held at Mt. Snow in West Dover, Vermont.



Executive Board Discussions The first New England Section Executive Board Meeting of 2015 went off without a hitch in West Dover, Vermont this past January.



Fearless Leader

John J. Kennedy, P.E., PTOE takes his oath as the ITE International President for 2015.



Talking Transit Signal Priority Joseph Herr, P.E., PTOE was one of many who presented their experiences with Transit Signal Priority on the RIPTA R-Line.



The 2014 New England Section Awards

Committee Members

The 2014 New England Section Awards Committee was comprised of Roger Dickinson (Vermont), Diane Morabito (Maine), Kim Hazarvartian (New Hampshire), David Freeman (Rhode Island), Joseph Balskus (Connecticut) and chaired by Douglas Prentiss who also voted as the Massachusetts representative. The Awards Committee's guidelines identify that upon selection by the President, the Chairperson appoints a committee including a member from each state who will serve a three-year term. There are carryovers as the guidelines state that terms should be three years, and two members 'turnover' each year. Each Committee member is a past award recipient, a NEITE requirement.

Process

The guidelines speak to the Chairperson reporting directly to the Section President. Otherwise the nomination process is open to the general membership. A database is kept by the Chairperson of past nominees which may be reused for future nominations. E-mail has facilitated the exchange of information among the committee. In 2014, all of the coordination/voting was completed by email. Candidate nominees were solicited from the membership via Section meetings, the Section Executive Board, State Chapter Officers, and general Section input.

2014 Presentation

Presentations were made by various Section members at the New England Section's Annual Meeting in Warwick, Rhode Island on December 1, 2014. The recipient of the 2014 Sections awards are:

<u>Transportation Leadership Award:</u> Richard A. Davey Former Secretary and CEO Massachusetts Department of Transportation

> <u>Transportation Engineer of the Year:</u> Joseph J. Giordano, P.E. President / CEO Gordon R. Archibald, Inc.

<u>William P. McNamara Distinguished Service</u> <u>Award:</u> Joseph F. Segale, P.E., PTP Policy, Planning, & Research Bureau Director Vermont Agency of Transportation

> Emerging Professionals Award: Keith E. Wenners, E.I.T. Traffic Engineer Vanasse Hangen Brustlin, Inc.



The New England Section of the Institute of Transportation Engineers' **TRANSPORTATION LEADERSHIP AWARD** is presented to **Richard A. Davey**

As Secretary of the Massachusetts Department of Transportation from Sept 2011 - Oct 2014, he re-instilled the public faith in the transportation system and through his leadership was instrumental in easing the maintenance backlog on the roadway system, and well as enhancing new projects like the South Coast Rail and the Green Line Extension.

Prior to joining MassDOT, Secretary Richard A. Davey served in a variety of capacities, including General Manager of the Massachusetts Bay Commuter Railroad (MBCR) in 2008. In 2010 he was appointed general Manager of the MBTA, a position he served prior to becoming MassDOT Transportation Secretary. He has been instrumental in Massachusetts's efforts to provide every region of the state with a safer, more efficient transportation system. At MassDOT he has been known for his work as an effective executive who was able to balance his responsibilities and has always pushed for more transportation funding. In 2013-2014 he led the administration's push for tax increases to re-invest in transportation designed to ease a maintenance backlog on the state's roads and bridges.

This transportation financing included such projects as:

- the "Fast 14";
- the accelerated bridge program (ABP);
- the controversial fare hikes at the MBTA;
- electronic tolling; and
- assisting in paving the way for major new projects such as:
 - The South Coast Commuter Rail
 - The extension of the MBTA's Green Line to Medford.



The New England Section of the Institute of Transportation Engineers' WILLIAM P. McNAMARA DISTINGUISHED SERVICE AWARD is presented to Joseph F. Segale, P.E., PTP

Policy, Planning, and Research Bureau Director for the Vermont Agency of Transportation for many years of outstanding service as President of the Section and to the Board and for his persistence in coordinating public and private participation in the New England Section and his continuing contributions to NEITE.

As a young engineer right out of undergraduate school, Joe started his career working for a construction company managing all phases of commercial, institutional and industrial construction projects in New England. After a number of years working outdoors, Joe went back to school to obtain his M.S. in City and Regional Planning from Clemson University where he initiated his real interest in transportation and regional planning. He joined ITE in 1995.

Joe then dabbled back and forth for a number of years from municipal and regional government to the private sector, where he has served until about three years ago. Presently Joe is Policy and Planning Manager for the Division of Policy, Planning and Intermodal Development for the VTRANS. He is involved in production of major transportation policies which guide the State spending and decision-making

While he was working his way along in his career he found time to be a Selectman in his home town of Huntington, VT and is a past Chapter President of Vermont ITE. He was President of the NEITE in 2013, where he had been instrumental in assuring public sector participation in the Section. Joe has a B.S. Civil Engineering degree from Worcester Polytechnic Institute and a M.S. in City and Regional Planning from Clemson University.

The 2014 New England Section Awards



The New England Section of the Institute of Transportation Engineers' EMERGING PRFOFESSIONALS AWARD is presented to Keith E. Wenners, E.I.T.

Traffic Engineer at Vanasse Hangen Brustlin, Inc. for his contributions to the New England Section of ITE as former Secretary of the UMass Student Chapter in 2012-2013, his graduate work on distracted driving and his continued growth as an Emerging Transportation Engineer while on the NEITE Program Committee.

Keith received his B.S. in Civil Engineering from the University of Rhode Island and then attended UMass-Amherst where he received his M.S. in 2012. He had been an active member of the UMass Amherst Student Chapter of ITE, joining in 2012, and has served as Chapter Secretary while he was a Graduate Research Assistant.

Keith's graduate research was related to direct observations of cell phone use to quantify distracted driving. He has published a few articles on the subject, including presenting at the Transportation Research Board Annual Meeting in Washington, D.C. He was recognized for contributions with the Student Service Award in 2013 from the UMass Amherst Student Chapter.

Keith started is professional career at Tetra Tech Rizzo, before joining Vanasse Hangen Brustlin, Inc. in Springfield, MA, where he presently works. Still maintaining his professional drive, he is working part-time on his Ph.D. at UMass Amherst and presently is a member of the New England Section Program Committee.

"It's a great honor that the NEITE has presented this award to me," said Wenners. "My graduate experience at UMass and current involvement with the NEITE makes me feel like I'm really contributing to the engineering field."



The New England Section of the Institute of Transportation Engineers' TRANSPORTATION ENGINEER OF THE YEAR AWARD is presented to Joseph J. Giordano, P.E.

President and CEO of Gordon R. Archibald, Inc. for outstanding leadership as Project Manager for the full interchange study in West Greenwich as well as the award-winning bridge projects in Lincoln and Cumberland that were recognized by RIDOT.

Joe is a registered Professional Engineer in multiple New England states and a long-time member of ITE, initially joining in April 1982.

Joe originally started his career with RIDOT in the early 1970's and has worked in various capacities in the consulting field. He was the principal responsible for a major transportation study for a proposed full interchange on Interstate 95 in West Greenwich, Rhode Island. He also served as the Project Manager for a corridor location study which included a Draft and Final Environmental Impact Statement for improved highway access to the Quonset Davisville Port and Commerce Park North Kingstown, from the existing Route 4 freeway in East Greenwich, Rhode Island.

He was Project Manager for the Berkeley and Martin Street Bridges in Lincoln and Cumberland, Rhode Island. Under Joe's leadership, this project was presented with the 2008 Pioneering Award by the RIDOT. He recently was the lead engineer on five (5) round-a-bouts in Rhode Island.

Joe is the past president of the Rhode Island Consulting Engineers, otherwise known as RICE. RICE has become an active supporter and participant in the Engineer Career Day Program sponsored by the RIDOT and others. Joe has a B.S. from the University of Rhode Island and a M.S. in Transportation from the Polytechnic Institute of New York.

Annual Meeting Images

Learning Complete Streets

Peter F. Ellison, E.I.T. of TEC, Inc. presents his past Northeastern University Capstone work as part of a series of Complete Streets technical sessions at the NEITE Annual Meeting.



Jessica Lizza, E.I.T. of Howard/Stein-Hudson Associates, Inc. presents her past Northeastern University Capstone work as part of a series of Complete Streets technical sessions at the NEITE Annual Meeting.



The Next American City *Charles Marohn, Founder of Strong Towns discusses Transportation in the New American City at the All-Day Professional Workshop.*



Packed House Over 200 members and non-members participated in the 2014 New England Section Annual Meeting.



The New England Chronicle

Student Research Spotlight: An Observational Evaluation of Safety Resulting from Driver Distraction

CHRISTINA M. DUBE, E.I.T. Traffic Engineer Vanasse, Hangen, Brustlin, Inc.

Distracted driving can be defined as "any activity that could divert a person's attention away from the primary task of driving" and is further classified into three types of distractions: visual, manual, and cognitive.^{1,2} Texting while driving incorporates all three types of distractions (visual, manual, and cognitive) within a single action and, as a result, decreases driving performance. In particular, distracted driving through the use of cell phones has become increasingly controversial in recent years in part due to the continual increase of the number of cell phones in use. In the United States in 2011. distracted driving was listed as a causal factor in 3,331 fatalities and 387,000 injuries, and in 2012 the death toll was similar with 3,328 fatalities and 421,000 injuries.¹ Many states within the United States have passed laws that restrict cell phone use in an effort to decrease the fatalities and injuries associated with distracted driving on an annual basis. Some states have succeeded in making primary laws against talking or texting while driving, while many other states struggle to pass this regulation. There is concern related to these trends given the increased prevalence of cell phones within the market coupled with the added distraction that may be present from the increased functionality and reliance associated with smart phones.

Research has shown "increased driving performance degradation and proportionately less time spent focusing on the road while texting, relative to baseline driving".³ With regards to direct observation of cell phone usage and texting the approach to completing observations has been somewhat limited. Most of the research completed to date, uses direct observations from an intersection setting, where vehicles are either stopped or slowed allowing for an observation to be made. There was a need for expanded research on distracted driving performance as related to the specifics of its prevalence within the driving environment.

By randomly observing drivers within the traffic stream, this research attempted to find commonalities among drivers and further understand driver behavior while distracted. This type of mobile observation had the ability to shed light on natural driving behaviors without any sort of driver bias. By analyzing distracted driving behavior, transportation engineers can incorporate various elements into the roadway design in an effort to enhance traffic safety.

By completing a mobile observation on a high speed roadway, the drivers who were engaging in secondary activities were observed for a short span of time. The aim was to observe distracted drivers in their "natural habitat" as they made the decision to use a cell phone collect data regarding their driving behavior.

Before the data collection team was assembled and sent out into the field to observe drivers, several items were addressed. A list of vehicle, driver, and distraction information of the observed vehicles were recorded by the research team for analysis. Basic information about the location of observation such as time of day the observations began and ended, roadway type, number of travel lanes, and speed limit for the given observation area were recorded. If the observation was taken while a vehicle was not at free flow speed (i.e. stopped at an intersection or stopped due to congestion) it was noted by the observer. The major observation emphasis areas were the following: vehicle type, travel lane positioning, vehicle action, vehicle speed, driver information. and passenger information. Additional variables included the driver's gender, approximate age range, distraction type, and the steering wheel holding position during the distraction. It was important that vehicles with an attentive driver were also be recorded for comparison to distracted drivers. The passenger information of a vehicle was collected for the purpose of determining whether or not the presence of a passenger likely increased or decreased the chance of a driver to operate a vehicle while distracted.

The motivation of the mobile distraction observation task was directly rooted in the desire to evaluate firsthand the prevalence and role of distraction from vehicles within the traffic stream. As noted, many of the direct observation studies completed to date are limited to solely intersection locations



with varying degrees of vehicle movement. Both qualitative and quantitative observations were made on a selected sample of roadways characteristics with diverse across Massachusetts. The selected roadways varied across several key independent variables, including number of lanes, shoulder width, speed limits, and traffic conditions. To capture observation data, a single driving observation period was typically segmented into various components with similar cross-section and traffic attributes. The segment designation allowed for the observers to note any changes in roadway characteristics, such as lane configuration or speed limit. For example, if an interstate expanded from two lanes to three lanes, this lane configuration change indicated an end point for the previous segment and a starting point for a new recording segment. This was done so that the driver observations could be analyzed according to similar roadway configurations from different driving periods. In total, 17 separate driving periods were completed, resulting in a total of 89 roadway segments with associated driver observations. These 89 segments or sections of roadway were a combination of single occurrence observation roadwavs and repeated observation roadways.

The resulting field observation trips resulted in a total of 1,575 recorded driver observations. Some of the more noteworthy findings are presented below:

• The distraction categories of cell talk, cell touch, no distraction, and other were recorded for each of the 1,575 vehicles as shown in Table 1.

Distraction Type	Count	Percentages of Observations
Cell Talk	124	7.87%
Cell Touch	74	4.70%
Other	71	4.51%
No Distraction	1,306	82.92%
Total	1,575	100.00%

Table 1: Distraction Type Summary from Field Observations Count and Percentages of Observations

Continued on Page 13

Continued from Page 12

 Of interest was the action of the vehicle at the time the observation was made as it relates to the driver's likelihood of engagement in a distracting task. There was a higher percentage of observations where drivers were both stopped and texting (18.81%) as shown in Table 2.

Vehicle Action	Cell Talk	Cell Touch	Other	No Distraction
Non- Passing	9.92%	3.87%	5.38%	80.84%
Passing	8.07%	3.11%	4.35%	84.47%
Stopped	2.97%	18.81%	11.88%	66.34%
1 Lane	5.81%	4.29%	1.52%	88.38%
Total	7.87%	4.70%	4.51%	82.92%

Table 2: Vehicle Action and Distraction Type Percentage of Observations

 Gender was recorded for each observation that was made. As shown in Table 3 the percentage of observations for texting while driving was larger for females than males.

Gender	Cell Talk	Cell Touch	Other	No Distraction
Female	8.73%	5.57%	4.82%	80.87%
Male	7.09%	3.99%	4.32%	84.61%
Un- known	25.00%	12.50%	0.00%	62.50%
Total	7.87%	4.70%	4.51%	82.92%

Table 3: Gender and Distraction Type Percentage of Observations

 Drivers were categorized by approximate age ranges as observed, somewhat subjectively, by the research team. The percentage of observations are shown in Table 4 for each distraction type and age group. Excluding the age group of 16-19 year olds, drivers ranging from 20-39 years old had a high percentage of observations for texting while driving (7.01%) and talking on the phone while driving (9.09%).

Age Group	Cell Talk	Cell Touch	Other	No Distraction
16-19	21.05%	5.26%	5.26%	68.42%
20-39	9.09%	7.01%	4.68%	79.22%
40-59	7.69%	3.01%	4.52%	84.78%
60+	2.17%	0.00%	3.80%	94.02%
Un- known	0.00%	25.00%	0.00%	75.00%
Total	7.87%	4.70%	4.51%	82.92%

Table 4: Observed Age Group and DistractionType Percentage of Observations

· Another interesting variable was the holding position of the steering wheel for distracted vs. non-distracted. The holding position category was added to the variables in an effort to replicate the data collected from the project completed by Fitch et al.4 The term "holding position" was originally meant to correspond to the driver's positioning of the cell phone while texting. For these field observations, however, it was modified, and it captured the drivers' steering wheel holding positions. By doing this, data was able to be captured for both non-distracted and distracted drivers. Table 5 displays driver holding position as a function of distraction type. This table indicates that it is likely that drivers who are engaging in distraction related activities will hold the steering wheel at 12:00 and 6:00 (top or bottom of the steering wheel). Drivers with a higher observed percentage of "No Distraction" events were more likely to be found driving with hands at 2:00/10:00.

Holding Position	Cell Talk	Cell Touch	Other	No Distraction
12:00	21.31%	6.56%	8.74%	63.39%
2:00/ 10:00	2.35%	3.52%	2.93%	91.20%
6:00	8.33%	10.96%	6.14%	74.56%
Other	4.55%	27.27%	4.55%	63.64%
No Record	2.91%	1.13%	2.27%	93.69%
Total	7.87%	4.70%	4.51%	82.92%

Table 5: Steering Wheel Holding Position and Distraction Type Percentage of Observations

To capture a wide range of distraction data, the research team drove on roadways with various functional classifications. Generally speaking, three different roadway types were used to capture data: Arterial (Route 9), Interstate (I-91) and Downtown (South Pleasant St.) environments. Route 9 has a speed limit of 35 mph, 2 designated through lanes (designated left turn lanes appear at various signalized intersections), and the roadway's shoulder width is approximately greater than 1 foot. I-91 is a high speed roadway with a speed limit of 65 mph. 2 travel lanes in the northern half which becomes 3 lanes around the Springfield region, and the roadway's shoulder width is approximately greater than 1 foot. The road of S Pleasant Street runs through the heart

Continued on Page 14

Continuing Education Opportunities in NEITE

As always, the Continuing Education Committee needs your feedback and fresh ideas for training opportunities that are innovative and that would draw significant interest to the Section membership. Most importantly, training opportunities that would serve you, the New England Section membership in the upcoming meetings and gatherings.

If you have ideas for training sessions that would benefit the membership the most and have a high interest level, whether a half-day or full-day or training, please contact:

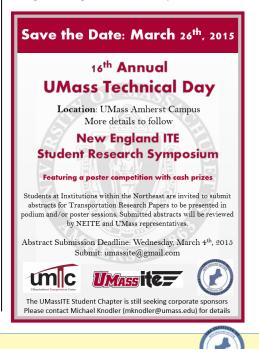
Jason M. DeGray, P.E., PTOE jdegray@gpinet.com

Northeastern District Executive Committee

The Northeastern District Executive Committee is pleased to announce that Joseph C. Balskus, PE, PTOE of the New England Section has been elected the incoming 2015 District Secretary / Treasurer. Joe will take office at our



January Executive Committee Meeting. We look forward to joe's participation on the District Board and know he will contribute greatly to the continued success of our organization. Please join me in congratulating Joe on this new position.



Some New/Old Faces in Some New Section Places



JOSEPH A. HALLISEY, P.E. New England Section President

ALAN T. CLOUTIER, P.E., PTOE New England Section Vice-President





REBECCA L. BROWN, P.E., PTOE New England Section Secretary

NICK M. FOMENKO, P.E., PTOE New England Section Treasurer





JASON M. DEGRAY, P.E., PTOE New England Section Sr. Director

SAMUEL W. GREGORIO, P.E. New England Section Sr. Director





DAVID J. DEBAIE, P.E., PTOE New England Section Jr. Director

JOHN Q. ADAMS, P.E., PTOE New England Section Jr. Director





WILLIAM F. LYONS, JR., P.E., ESQ. Past Presidents Council Chair

KIM E. HAZARVARTIAN, P.E., PTOE Awards Committee Chair



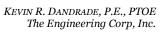


IAN A. MCKINNON, E.I.T. Membership Committee Chair

MICHELLE DANILA, P.E., PTOE Goals/Objectives Committee Chair



'16 Northeastern District Annual Meeting Co-Chairs







JEFFREY S. DIRK, P.E., PTOE Vanasse and Associates, Inc.

Continued from Page 13

downtown Amherst; the speed limit is 30 mph, there is 1 lane per direction of travel, and the roadway's shoulder width is approximately equal to 1 foot. The distraction distribution fluctuates among the three roadway types as shown in Table 6, Table 7, and Table 8. Drivers on the interstate had a lower percentage of texting while driving observations (2.83%) than the drivers on the downtown road (5.23%) or the arterial (10.34%). The arterial had a considerably high percentage of observations for both talking on the phone (11.49%), texting while driving (10.34%), and other (7.66%). This may be due to the stop and go nature of the traffic and low speeds on this roadway. Drivers may be more likely to challenge themselves with a secondary activity if the primary activity of driving on this roadway is not generating a challenge. The percentage of observations for texting while driving on the interstate (2.83%) was lower than that of the downtown roadway (5.23%), but the percentage of

Distraction Type	Count	Percentage of Observations
Cell Talk	30	11.49%
Cell Touch	27	10.34%
Other	20	7.66%
No Distraction	184	70.50%
Total	261	100.00%

Table 6: Arterial Distraction Summary

Distraction Type	Count	Percentage of Observations
Cell Talk	23	5.46%
Cell Touch	22	5.23%
Other	9	2.14%
No Distraction	367	87.17%
Total	421	100.00%

Table 7: Downtown Distraction Summary

Distraction Type	Count	Percentage of Observations
Cell Talk	37	7.47%
Cell Touch	14	2.83%
Other	21	4.24%
No Distraction	423	85.45%
Total	495	100.00%

Table 8: Interstate Distraction Summary

observed drivers talking on the phone on the interstate (7.47%) was higher than that of the downtown roadway (5.46%).

The field observations were completed in an effort to standardize an additional method for driver data collection. Part of the research objective was to define and develop a field protocol for completing mobile observations. This initial study adds to the existing body of literature related to drivers and distraction. There continues to remain a need to employ naturalistic data with countermeasure aimed at mitigating driver distraction.

Reference

- ¹NHTSA. *Distraction.gov*. "Facts and Statistics." United States Department of Transportation. <u>http://</u> <u>www.distraction.gov/content/get-the-</u> <u>facts/facts-and-statistics.html</u>. Accessed Nov. 4, 2013.
- ² Boyle, L. N., Lee, J. D., Peng, Y., Ghazizadeh, M., Wu, Y., Miller, E... & Jenness, J. *Text Reading and Text Input Assessment in support of the NHTSA Visual-Manual Driver Distraction Guidelines*. Report No. DOT HS 811 820. NHTSA, United States Department of Transportation, 2013.
- ³ Ranney, T.A., Baldwin, G. H. S., Parmer, E., Martin, J., Mazzae, E. N. Distraction Effects of Manual Number and Text Entry While Driving. Report No. DOT HS 811 510. NHTSA, United States Department of Transportation, 2011.
- ⁴ Fitch, G. A., Soccolich, S. A., Guo, F., McClafferty, J., Fang, Y., Olson, R. L., Perez, M. A., Hanowski, R. J., Hankey, J. M., & Dingus, T. A. *The impact of hand-held and hands-free cell phone use on driving performance and safety-critical event risk*. Report No. DOT HS 811 757. NHTSA, United States Department of Transportation, 2013.

Christina Dube, E.I.T. has recently completed her M.S. in Civil Engineering with a concentration in transportation safety through her work with Dr. Michael Knodler, Jr. at the University of Massachusetts at Amherst. During her time at UMass, she was Vice President of the UMass Amherst ITE Student Chapter, and she hopes to continue her involvement throughout her professional career. Christina is currently a Traffic Engineer with Vanasse Hangen Brustlin, Inc. in Boston, Massachusetts.



Committee, Chapter, and Student Chapter Updates



CONNECTICUT STATE CHAPTER Chapter President: Michael Morehouse, P.E. Report Submitted By: Craig D. Yannes, P.E., PTOE

The Connecticut Chapter of ITE held its Fall Meeting on November 11th at the Connecticut DOT (CTDOT) Headquarters. The meeting

attendance was 62 participants and included a presentation by Rich Armstrong of CTDOT and Transystems (led by David Stahnke) on the Interstate 84 Project and the innovative analysis techniques used on the project. The goal of the event was to promote Connecticut ITE membership within both the private and public sectors.



On January 29th, Connecticut ITE and CT Intelligent Transportation Society (ITS) held its annual joint meeting. The event included a social hour and a dinner with a presentation by Mark Baker, Terri Thompson, and Mohammed Bishtawi of CTDOT on the recently completed Interstate 84 Southington Accelerated Bridge Construction Project.

The Connecticut Chapter is currently coordinating with the Connecticut Chapter of the American Planning Association (CCAPA) to hold a joint event on April 8, 2015 in Manchester, CT. As in past years, the event will also include Connecticut ITE elections, Chapter Awards, and the Student Scholarship presentation. More details to follow.



MAINE STATE CHAPTER Chapter President: John Q. Adams, P.E., PTOE

The Maine Chapter of ITE held its last Chapter meeting on October 22, 2014 at the Maine DOT Region 2 Office in Augusta. The meeting was attended by approximately 25 people. Attendees were offered three (3) Professional Development Hours (PDHs) with two technical presentations. The first topic of our technical session included; utilizing the Aldis GridSmart 3D Omni-

directional video detection camera for both vehicle presence detection and collection of traffic counts. Typically one camera mounted strategically can provide detection for each of the intersection approaches. Staff from Electric Light Company in Cape Neddick, Maine presented and reviewed set-up, applications and use of the Aldis camera. The second topic of the technical presentation was a discussion of the latest MaineDOT Traffic Volume Data Collection Policies for use with MaineDOT Traffic Movement Permits, Traffic Signal Warrants and MaineDOT Studies and Design projects. The revised policy was a collaborative effort between MaineDOT staff, a Chapter Subcommittee and the Maine ITE Chapter membership in general. This effort was led by MaineDOT State Traffic Engineer, Steve Landry.

We are currently in the planning stages for our Winter Meeting which will be held at DiMillo's Floating Restaurant in Portland, Maine, in late February or early March. More information to follow on this meeting. Our Chapter Social Committee will also be looking to plan an event for this summer.



NEW HAMPSHIRE STATE CHAPTER Chapter President: David Saladino, P.E.

The New Hampshire Chapter of ITE Annual Meeting was held on December 16, 2014 at the Common Man Restaurant in Concord, NH. The meeting features two presentations; including: Updates on Current and Upcoming NHDOT Projects and Inititives, presented by Bill Oldenberg, Assistant Director of Project Development at New Hampshire DOT (NHDOT); and The

New Alternative in Traffic Analysis Software: Microsimulation + Signal Optimization + TIA + HCM Analysis in One, presented by Daniel Morgan, Vice President at Caliper Corporation.

The next New Hampshire Chapter event will be its Spring Meeting which will be held in March. Details for the meeting are still in the works.



15



Finall roviding engineering services since 1924 www.fando.com 800.286.2469 onnecticul • Massachusetts • Rhode Island • South Carolina Ph: 207-351-8673 Fx: 207-361-2017 coastaltraffic @ outlook.com www.coastaltraffic.org CORSTRECINC. Roadway/Intersection Product Sales and Solutions NEERING SUCCESS TOGETHER

FRANK J. ROMEO, P.E. PRESIDENT

P: 401.333.2382 E: FRomeo@BETA-Inc.com W: www.BETA-Inc.com

6 Blackstone Valley Place, Suite 101, Lincoln, RI 02865



VERMONT STATE CHAPTER Chapter President: Jennifer Conley, P.E., PTOE

The Vermont State Chapter and New England Section of ITE held its annual Joint Ski Meeting on January 21, 2015 at Mt. Snow in West Dover, Vermont. The day started with morning and early afternoon skiing concurrently with the NEITE Executive Board Meeting.

The first technical presentation was provided by Marla Keene of Vanasse Hangen Brustlin, Inc. Marla presentation, entitled: "Beyond the Ditch: Stormwater Compliance for Linear Projects," focused on the regulatory environment that is driving more linear transpiration projects to provide runoff pollutant control and how maintenance and right-of-way concerns affect stormwater. The second technical presentation was provided by Bruce Nyquist of the Vermont Agency of Transportation (VTrans). Bruce's presentation discussed in detail the hierarchy and organizational structure of VTrans. The presentations were attended by 24 Vermont ITE and NEITE participants.

The afternoon concluded with a networking event at Harriman's Restaurant where members enjoyed the company of their colleagues.



UNIVERSITY OF MASSACHUSETTS STUDENT CHAPTER Chapter President: Cole D. Fitzpatrick, E.I.T.

The UMass Amherst ITE Student Chapter had a very successful 2014. In addition to winning Northeast District Chapter of the year, UMass represented the district in the International Traffic Bowl where they took UT Austin, the eventual

champion, down to the wire in the first round. Recent alum Keith Wenners, E.I.T. received the Emerging Professional Award and Ph.D. student Cole D. Fitzpatrick, E.I.T. received the Desjardins Scholarship. The student chapter represented the section well in 2014 as they sent six students to the International meeting in Seattle and five students to the Technical Meeting in Miami.

UMass ITE started 2015 off strong as well. The chapter, along with the UMass Transportation Center, hosted their 3rd annual UMass reception at the Transportation Research Board Annual Meeting. The reception, which was held at Penn Social in Washington DC, was well attended and gave students the opportunity to network with other students and professionals from across the country. The chapter is looking forward to another full calendar of events, highlighted by the 16th Annual UMass Technical Day and Student Symposium which will be held on the UMass campus on Thursday, March 26th.

Finally, the student chapter is under new leadership. Former chapter leaders Curt Harrington and Christina M. Dube, E.I.T. graduated with their M.S. degrees in December and recently started new jobs. Curt with Parisi Transportation Consulting in San Francisco and Christina with VHB in Boston. Cole D. Fitzpatrick, E.I.T. and Craig Schneider, E.I.T. are the new President and Vice President respectively. Graduate student Donald Panjaitan will serve as Secretary and undergraduate student Andrew Reeder will serve as Treasurer.



New England Section of the Institute of Transportation Engineers



MASSACHUSETTS STATE CHAPTER Chapter President: Kenneth P. Cram, P.E. PTOE Report Submitted By: Hans Kuebler, E.I.T.

To all my Massachusetts Chapter (MAITE) and fellow New England Section members, it is that time of year again that we the Board of MAITE would like to fill you in on our groups activities.

Biennial elections were held in the Summer of 2014 with the results being presented at MAITE's annual event in September. Our newly elected President is Kenneth P. Cram, P.E., PTOE of Bayside Engineering; Hans Kuebler, E.I.T. of Howard/Stein-Hudson Associates is our Vice-President; Jeffrey T. Bandini, P.E., PTOE of Nitsch Engineering is our Treasurer; and Matt Starkey of McMahon Associates is our Secretary. Daniel Nelson, P.E. of Howard/Stein-Hudson Associates is our immediate past President after having served as president for the past two years.

MAITE meets monthly to plan events, of which our biggest is our annual joint NEITE/MAITE meeting which is held every September in Waltham, Massachusetts. Mark your calendars now as the date for this year's meeting is tentatively set for Thursday, September 24, 2015. The 2014 event was another well-attended and successful event, with the theme of Fast-Track Design for a Healthier Future. The all-day training program was for the traffic analysis computer program PTV Vistro, hosted by Bill Cisco. Afternoon technical sessions were on the flashing yellow arrow, hosted by UMass-Amherst professor Michael A. Knodler, Jr., Ph.D. and MassDOT systematic safety improvements, hosted by Assistant State Traffic Engineer Jim M. Danila, P.E., PTOE. The keynote dinner program featured a collaborative presentation on the Connect Historic Boston project, hosted by Ken Miller, Federal Highway Administration; Vineet Gupta, Director of Planning at BTD; Bill Egan, Boston Public Works; Dave Matton, Howard/Stein-Hudson Associates, Inc.; and Nick Jackson, Toole Design Group. Cole D. Fitzpatrick, E.I.T. a graduate student at UMass Amherst and Joel Shaffer, an Undergraduate at Northeastern University were awarded the Desjardins Scholarship. Thank you again for those that took part in our event!

MAITE also fosters camaraderie within the ranks by scheduling a few social events over the course of the year. The last social was held on November 13, 2014 at the Beantown Pub and had a great turnout. Quite a few new faces were seen as we played pool and enjoyed appetizers, with several people walking away with great door prizes. The week following the social, MAITE, along with NEITE and the MIT Transportation Club, helped co-sponsor the YPT Transportation Trivia Night held at LIR in downtown Boston. This was a great event to connect the groups with some lighthearted competition. In September we also attended a Red Sox game and are looking to attending another this upcoming season. Stay tuned for the next event, looking to be held in the coming weeks!

We are on the WEB at <u>http://www.neite.org/MA/index.shtml</u> and are in the process of creating a new e-mail address to help us stay in better contact with our members.

We currently have a membership of just over 110 members. If you attended the annual meeting in September, you are automatically enrolled as a member for the following year. Otherwise, it is only a small fee of \$10 per year for MassITE membership. Speak to any of the officers or Directors for additional information. We look forward to another successful year!

Employment Opportunities

BETA Group, Inc.



Traffic Engineer

Norwood, MA | Hartford, CT | Lincoln, RI

BETA is looking for new Owners! BETA is an employee owned firm seeking a full-time **Traffic Engineer**. This position requires applicants with 3-10 years of experience in traffic engineering. Applicants must be interested in learning from and contributing to a team based environment. Working knowledge of various traffic analysis software required. Bachelor of Science Degree in Civil Engineering and EIT required.

BETA is an AA/EOE employer and offers an exceptional compensation package with excellent 401(k), medical, dental, life insurance, and ESOP options.

For Detailed Employment Opportunity Information, please visit: http://neite.org/job-opportunities/

Civil/Transportation Engineer Norwood, MA | Hartford, CT | Lincoln, RI

BETA is also seeking a full-time **Civil/Transportation Engineer**. Applicants must be highly motivated selfstarters with excellent organization and written communication skills, and be able to work and contribute in a team atmosphere. Applicants must be experienced in the design of various roadway projects and the preparation of construction documents in accordance with MassDOT requirements. This position requires applicants with 6-12 years of experience have a Bachelor of Science Degree in Transportation or Civil Engineering and have proficiency in AutoCAD/Civil 3D, as well as other computer skills. PE Registration in MA is preferred.

Professional Services Directory





SAVE THE DATE!!!

neite=

16th Annual

Thomas E. Desjardins Memorial Golf Tournament June 3rd, 2015 | Sandy Burr Country Club | Wayland, MA

Employment Opportunities

MDM Transportation Consultants, Inc.

MDM TRANSPORTATION CONSULTANTS, INC.

MDM is a progressive firm that employs team-oriented interaction on diverse projects and offers an exciting work environment. MDM is currently seeking qualified, self motivated candidates for the following positions:

Transportation Planner / Engineer Marlborough, Massachsuetts

Position involves a wide variety of planning and engineering tasks, including field research, data collection, parking studies, speed studies, traffic counts, safety evaluations/crash analysis, computer modeling, capacity analysis and preparation of design plans for roadway and intersection improvements. Applicant would assist senior staff in the preparation of traffic impact and access studies, environmental impact reports, functional design reports, quantity/cost estimates, specifications and bid documents for roadway and traffic signal improvements. Experience with Highway Capacity Software (HCS), Synchro, SIDRA, Excel, MS Word and AutoCAD Civil 3D is required. Experience with traffic signal design, stormwater design, MassDOT design standards or resident engineering is desirable, but not required. For the ideal candidate, this position could evolve into a project management position. BSCE, EIT, excellent written and verbal skills and a minimum of 2-10 years experience is required. Working toward PE registration is desired.

Senior Transportation Planner / Engineer Manager Marlborough, Massachusetts

involves taking responsible charge for Position Transportation Planning and Permitting projects, including preparation of traffic impact and access studies, analysis/modeling, transportation parking studies, environmental impact reports, corridor studies, multimodal transportation studies, annual travel surveys/agency reporting; assessment of roadway improvements/ mitigation, public/agency outreach, coordination and project representation at public meetings.

Experience with HCS/Synchro, SIDRA, MS Office is required. Experience with AutoCAD Civil 3D is desirable, but not required. BSCE, EIT, excellent written and verbal skills and a minimum of 5-15 years experience is required. Working toward PE and PTOE registration is desired; PE registration preferred.

MDM offers a challenging opportunity for career growth in our Marlborough, MA office. We offer a dynamic working environment with Principal Transportation Planners and Engineers on private land development and public sector projects. MDM is an Equal Opportunity/Affirmative Action Employer and offers an excellent salary/benefits package, including bonuses.

For confidential consideration, please forward a cover letter and resume to: MDM Transportation Consultants, Inc. 28 Lord Road. Suite 280 Marlborough, MA 01752 Phone (508) 303-0370 Fax: (508) 303-0371 e-mail: careers@mdmtrans.com

For more information on the 2015 Thomas E. Desjardins Memorial Golf Tournament, please contact Fayssal J. Husseini, P.E., PTOE at (857) 206-8756 or via email at fhusseini@nitscheng.com.

For Detailed Employment Opportunity Information, please visit: http://neite.org/job-opportunities/

CLD Consulting Engineers, Inc.

CLD Consulting Engineers, Inc. is a mid-sized civil engineering firm headquartered in Manchester, New Hampshire with additional offices in Maine and Vermont

Survey Technician / Junior Crew Chief Manchester, New Hampshire

We have an immediate opening for a Survey Technician / Junior Crew Chief at our Manchester, NH facility. The selected candidate will assist our Manchester staff with field and base plan preparations. This position involves a 50/50 split of field and office work. This is an hourly paid contract to permanent hire position.

Job Requirements: Successful candidate will have 2 to 5 years of demonstrated survey work experience. Working proficiency with AutoCAD Civil 3D and CARLSON software will be required to effectively perform the in-house office function. Ability to work in both team setting and on individual assignments. Self-starter with a desire to become the subject matter expert with Civil 3D and CARLSON software. Will be at least 18 years of age, well suited to outdoor work, able to traverse uneven terrain. communicate effectively, and be able to work during daylight hours. This role requires the ability to closely follow verbal instructions and carry field equipment to land sites that may require hiking to access. Candidate will have the ability to work (with reasonable accommodation) in rugged terrain carrying upward of 50 lbs., hike, lift, bend, stoop, use a machete and other hand tools to cut and clear line, possess excellent vision, and the ability to work in extreme climate conditions (cold and/or hot) while utilizing appropriate safety gear. The CLD Survey team works in conjunction with a variety of disciplines (structures, highway, municipal, site development, planning and environmental, etc.). The diversity and complexity of projects is touted as a unique benefit of working in this group.

Qualifications: Qualified candidates will have a high school diploma or GED. College degree in survey preferred. Certification as an LSIT desired, training with AutoCAD Civil 3D and CARLSON software. A valid driver's license, references and the ability to work in both office and field settings.

Benefits: CLD offers competitive salary, benefits and a great working environment. Additionally, we offer an extensive on-line university to foster the career development of our staff and our future owners and leaders. If you are looking for a challenge and the ability to stretch and grow your abilities, we would like to hear from you!

All qualified candidates are encouraged to apply by sending in a cover letter and resume. We are an Affirmative Action employer. Please see our website at www.cldengineers.com for more details.

Contact Information: Lisa King, HR Director CLD Consulting Engineers, Inc. 540 N. Commercial Street Manchester, NH 03101 Phone: 603.668.8223 Fax: 603.668.8802 E-mail: lisak@cldengineers.com

New England Section of the Institute of Transportation Engineers

18

The New England Chronicle





Employment Opportunities

The Engineering Corp (TEC, Inc.)

TEC, Inc. is a growing consulting engineering firm in he Boston Metro North and New Hampshire Seacoast area. The TEC Team Delivery Model is a working partnership of planning, permitting, design and construction professionals focused on the single outcome of efficient project delivery. If you are an enthusiastic self-starter looking for an opportunity to share in the excitement of growth, please visit www.theengineeringcorp.com or forward your expression of interest with salary requirements to Rebecca DiZoglio, at RDiZoglio@theengineeringcorp.com

Highway Design Engineers Lawrence, Massachusetts

TEC, Inc. is seeking entry level Highway Design Engineers to deliver quality products for our clients. These opportunities require significant and progressive aptitudes in the following areas: preliminary and final design of various roadway, pedestrian and bicycle improvement projects; preparation of highway construction documents including plans, specifications, and estimates; assistance in preparation of environmental permitting documents; and field inspection of work and implementation of construction documents

To be successful in these full time positions, candidates should be fully dedicated to the tasks, hardworking, a selfstarter, and responsive to project schedule demands. Interested candidates should have a demonstrated interest in transportation planning, highway design, 3-D modeling and analysis, construction engineering, and cost estimating. AutoCAD experience and BSCE degree is required.

Transportation Engineers

Lawrence, Massachusetts

TEC, Inc. is seeking entry level Transportation / Traffic Engineers to deliver quality products for our clients. These opportunities require significant and progressive aptitudes in the following areas: intersection and roadway corridor capacity and queuing analysis; preparation of Traffic Impact, Access, and Parking Studies; preliminary and final design of traffic signals and coordinated signal systems, including preparation of construction documents with specifications and estimates; preliminary and final design of various pedestrian and bicycle improvement projects; assistance in preparation of environmental permitting documents; field inspection of work and implementation of construction documents

To be successful in these full time positions, candidates should be fully dedicated to the tasks, hardworking, a selfstarter, and responsive to project schedule demands. The firm provides transportation / traffic engineering services to private developers, municipalities, and state DOTs. Interested candidates should have a demonstrated interest in transportation planning, analysis, and design, construction engineering, and cost estimating. AutoCAD experience and BSCE degree is required. Synchro and VISSIM experience is preferred.

Full Employment Opportunity Notices are Available on the New England **Section Webpage**

To submit Employment Opportunities, **Please contact:** Samuel W. Gregorio, P.E. Chronicle Editor sgregorio@theengineeringcorp.com

http://neite.org/job-opportunities/

For Detailed Employment Opportunity Information, please visit: http://neite.org/job-opportunities/



Experienced Highway Design Engineers Lawrence, Massachusetts

TEC, Inc. is seeking experienced Highway Design Engineers to deliver quality products for our clients. These opportunities require significant

and progressive experience in the following areas: preliminary and final design of various roadway, pedestrian and bicycle improvement projects: preparation of highway construction documents including plans, specifications, and estimates; assistance in preparation of environmental permitting documents; field inspection of work and implementation of construction documents; assistance in project and client management duties; mentoring junior staff on highway design topics; and participation in business development for the firm

Candidates should be fully dedicated to the tasks, hardworking, a self-starter, and responsive to project schedule demands. The firm will require a minimum of 2-7 years of related experience in both private development and public transportation improvement projects. Interested candidates should possess skills in transportation planning, highway design, 3-D modeling and analysis, construction engineering, cost estimating, specification writing, and bid document preparation. A firm understanding of current design standards for highway design and construction, and familiarity with the DOT design development processes is required. AutoCAD Civil 3D experience and BSCE degree is required, along with ability to obtain PE licenses in MA and NH.

Gorrill Palmer

Are you interested in working on exciting and challenging projects in the Northeast and Mid-Atlantic

regions? Are you interested in a small firm environment where you can quickly gain experience and responsibility? Are you interested in personal growth and making a meaningful contribution?

GORRILL

PALMER

Gorrill Palmer is a multidisciplined civil engineering firm with offices in Maine and Virginia. We are seeking a talented and career minded individual to work in the Traffic Division of our Transportation Group at our corporate office located in Gray, Maine. In addition to gaining significant experience and responsibility, you will also have the opportunity to live in or near Portland Maine, one of the most desirable small cities on the East Coast, and experience the natural environment that Maine has to offer

Traffic / Transportation Engineers Grav. Maine

We are seeking a mid-level traffic/transportation engineer to enhance our team by contributing to the development of transportation/traffic studies and to the design for both public and private development projects. Your responsibilities will include the following: development of traffic data collection programs for projects; capacity analyses using HCS, SimTraffic, Syncho, Sidra and other transportation software; corridor studies; signal design; traffic signal warrant analysis and traffic control plans; transportation demand programs; pedestrian and bicycle facility plans; parking studies; report preparation; and public presentations

The successful applicant shall possess a Bachelor's degree in Civil Engineering, a Master's degree in Transportation, and an FE certification. Two to four years work experience is preferred. The preferred candidate will be proactive in advancing their knowledge in the transportation field and will contribute to projects in both our Maine and Virginia offices. Gorrill Palmer offers a competitive salary and benefits. Interested applicants are invited to visit our website to learn more and to apply at http:// www.gorrillpalmer.com

Professional Services Directory



RICHARD J. BENEVENTO PRESIDENT

> RBENEVENTO@WORLDTECHENG.COM T: 781.933.4800 ext: 224 c: 617.835.3401 F: 781.933.4801 300 TRADECENTER SUITE 5580 WOBURN, MASSACHUSETTS 01801-7433 WWW.WORLDTECHENGINEERING.COM



President 54 Canal Street Boston, MA 02114-2011

o/f (877) 305-4163 m (978) 996-4252 wlyons@fhisllc.com www.fhisllc.com





Engineering, Landscape Architecture and Environmental Science



99 Realty Drive Cheshire, Connecticut 06410 Phone: (203)-271-1773 | Fax: (203)-272-9733 www.miloneandmacbroom.com

Nitsch Engineering

www.nitscheng.com

Civil Engineering Land Surveying Sustainable Site Consulting Transportation Engineering Planning GIS WBE in MA, NY, PA & VA



CT, MA, VT, NH, ME, NY

KWH ENTERPRISE, LLC | KERMIT HUA

Please send articles, listings (ITE and other relevant), graphics and photographs to the Editor: Samuel W. Gregorio, P.E. at sgregorio@theengineeringcorp.com

The New England Section Chronicle staff thanks you and we hope you enjoy the issue.



PLAN | PERMIT | DESIGN | CONSTRUCT

65 GLENN STREET | LAWRENCE, MA 01843

(P) 603.601.8154

Samuel W. Gregorio, P.E. (Editor) Kevin R. Dandrade, P.E., PTOE Rebecca L. Brown, P.E., PTOE (P) 978.794.1792 169 OCEAN BOULEVARD, UNIT 101 | HAMPTON, NH 03842 Douglas S. Halpert, E.I.T.

TEC, Inc. Contributing Staff:

Special Thanks to: Claire Choquette - Ocean State Signal Co. Lisa A. Rutherford - Ocean State Signal Co.

REMINDERS

Those members of the New England Section that have not updated your personal and/or business contact information recently should visit the ITE website and do so. An updated contact directory allows the Section to properly send information emails, election information, and other details such as the NEITE calendar.

http://www.ite.org

For those members of the New England Section that would like to be included on the Section email list for Google Groups, please contact Samuel W. Gregorio, P.E. at TEC, Inc.

sgregorio@theengineeringcorp.com

The New England Chronicle is the official publication of the New England Section of the Institute of Transportation Engineers. The New England Chronicle is published quarterly. Opinions and articles expressed within the Chronicle do not necessarily reflect official ITE or NEITE policy unless specifically stated. Representations of sponsors and our Professional Services Directory via business cards does not establish any official support of products or services.