GranITE Chips

NEWSLETTER OF THE NEW HAMPSHIRE CHAPTER OF THE INSTITUTE OF TRANSPORTATION ENGINEERS
OCTOBER 2005

SUMMER TECHNICAL SESSION
June 22, 2005
Portsmouth, New Hampshire

The summer technical session was led by Dane Ismart, a semi-perennial presenter for this NEITE-sponsored meeting. Dane, a former Federal Highway Administration (FHWA) engineer and employee for the Louis Berger Group, presented the major policy and design considerations for providing access management for roadway corridors.

Access management is a term given to an increased level of control of turning movements and/or the spacing and location of private driveways along busy commercial corridors. The benefits of access management include increased safety by reducing the number of conflict points for vehicular and pedestrian traffic, defining crossing points for pedestrians, improving corridor level of service by reducing stop and go traffic, and by applying corresponding landscaping and signing improvements.

The use of access management techniques is closely linked to the functional classification of the roadway. Primary arterials are priorities for access management since their main purpose is to efficiently move vehicles with a secondary function of providing access to private property. A median island is the most common feature used to control left turns into and out of a limited number of major driveways adjacent to the roadway. Corner radii are typically larger where there is a need to accommodate vehicles turning off the arterial at a higher speed.

Another element of access management deals with modifications to private development sites. For parking lots adjacent to a busy arterial, one of the most important considerations for improved operations is the lengthening of the throat of a primary driveway and locating internal intersections farther away from the roadway. In some jurisdictions, left-turns out of a site have been replaced with a right-turn movement coupled with a U-turn maneuver at a significant distance (±500 feet) downstream.

There is a statistical relationship between the number of crashes and curb cuts per mile. Safety is improved when a two-way center turn lane is replaced by a median island and a permissive left-turn is diverted to an adjacent signalized intersection that has a protected left-turn phase. The National Cooperative Highway Research Program (NCHRP) has published several related to the safety benefits of access management techniques.

Dane provided many comical interjections that kept the audience tuned into the presentation. His wealth of experience was shared with approximately 32 members for a full afternoon.

SUMMER EVENING MEETING
June 22, 2005
Portsmouth, New Hampshire

Following dinner, the fifty-two NEITE/ NHITE/MEITE members welcomed three speakers who have been instrumental to introducing electronic toll collection in northern New England: Albert Almasy from the New Hampshire Department of Transportation (NHDOT); Paul Godfrey from HNTB; and Daniel Paradee from the Maine Turnpike Authority.

New Hampshire Experience

Mr. Almasy presented the history of the EZ Pass System in New Hampshire from initial inclusion on the TIP in 1998, through design and an active political process, and ultimately introduced this year. The project was originally bid in 2001, but later re-bid in 2002 due to a limited number of initial respondents. The project was eventually awarded to The Revenue Markets, Inc. (TRMI) for $15.8M. The Bureau of Turnpikes decided to implement the E-Z Pass System since it could be used seamlessly with surrounding states' systems. It offered the best long-term compatibility and improved reporting.

The project involved the introduction of EZ Pass equipment to all toll lanes, some of which were converted to dedicated EZ Pass lanes. This project allowed NHDOT to upgrade the signs for each toll plaza and provided a previously absent computer communications network between all toll houses.

At the time of the meeting, the transponders were being sold via the internet and in a few NHDOT EZ Pass Walk-in Centers. Many of the attendees were interested in the status of the token program and how the project would be phased between the three sections of highway within the turnpike system.

Maine Experience

Paul Godfrey, P.E. and Daniel Paradee presented the planning and design process associated with the conversion of the existing TransPass System to the widely accepted EZ Pass System. The TransPass System was originally implemented between 1994 and 1997 in an effort to improve capacity at toll facilities using electronic toll collection. Once TransPass was fully implemented, the Maine Turnpike Authority immediately noticed savings in capital and O&M costs; however, the technology was quickly aging and replacement parts were often difficult to obtain. During this same time period, the EZ Pass System developed and was quickly becoming the top choice for most turnpike authorities.

The planning process for updating the electronic toll collection equipment began in 2002. They now had the ability to take advantage of preferred pricing on equipment, had better chances of getting on-going support and enhancements, and would also be able to provide their users with equipment that would be operable in other states. The most difficult problem was maintaining the existing TransPass System until they could switch over to the EZ Pass System. HNTB, as Maine Turnpike's consultant, led the effort to coordinate the large team of stakeholders, consultants, and contractors.

The switchover process required significant factory testing and prototype testing on Maine roadways. Intensive project coordination meetings were required to make decisions concerning toll lane commissioning, how to fit a second set of equipment to the existing toll houses, and

the best means of transition to EZ Pass technology in one evening, Subsequently, there was extensive field-testing and fine-tuning of the new equipment.

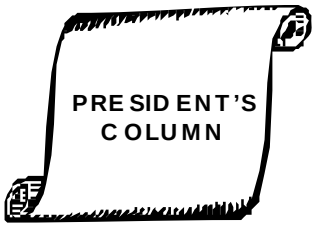
On February 1, 2005, the Maine Turnpike Authority and HNTB switched over 124 toll lanes, using 15 sign crews, 6 EZ Pass lane verification crews, 12 "command center" staff, and 6 standby crews with electrical contractor and supplier staff. In all, the conversion was substantially completed in 7 hours. At the time of the meeting, HNTB was still troubleshooting the system to obtain better accuracy ratings, desired for greater than 99.9%. This project was a wonderful example of project management and team coordination during design, construction, and implementation.

Both NHDOT and Maine Turnpike Authority look forward to providing their users with continued reliability with their EZ Pass Systems. The NH Chapter would like to thank them for their fact-filled presentations.

NEW ENGLAND SECTION NOTES

The New England Section held its joint meeting with the Massachusetts Chapter on September 14, 2005 at the Best Western in Waltham, MA. The afternoon session included presentations from Alan Deditch (Highway Tech) about the Maine Mall Signal Coordination Project, Seth Asante (from CTPS) about the Braintree Split Traffic Study, and Dan Grabauskas (Commonwealth of Massachusetts' Executive Office of Transportation) concerning the Draft Statewide Transportation Plan for the Commonwealth of Massachusetts. The key note speaker during the evening session was Professor Joseph Sussman, PhD from MIT, who discussed emerging issues in transportation.

The New England Section of the Institute of Transportation Engineers will hold its annual meeting on Monday, December 5, 2005 in Warwick, RI. Additional information on upcoming meetings can be found on the section web site at www.neite.org.



I have heard several requests from NH Chapter members and members of public agencies/boards recently concerning *local* trip generation data for several land uses. Typically, we are able to refer to documents, such as Trip Generation, published by ITE, as the national standard for estimating the number of trips associated with specific land uses. However, there are still many land uses or combination of land uses that are not noted within the manual, such as a community shopping center (small strip plaza) or drive-through donut/coffee shops (as a separate land use code from "fast food restaurant"). Please contact me if you are interested in volunteering data or time to compile various data sources.

The NH Chapter is currently soliciting nominations for 2006 officers. I plan to pass the torch to one of the other officers or another successful nominee in December. I encourage involvement in the NH Chapter as a way to represent the transportation engineering industry in New Hampshire. This applies to experienced professionals, new engineers, and local officials.

Cheerfully Submitted,

Kevin R. Dandrade, P.E., PTOE

NHITE JOB POSTINGS

CITY OF NASHUA, NH
TRAFFIC ENGINEER
PUBLIC WORKS DIVISION

Provides traffic engineering services to the City including but not limited to design and review of plans for safety and efficiency; plans and evaluates public and private traffic control; communicates with City government and outside agencies; supervise private sector contractors; reviews and evaluates traffic projects. Bachelor's degree in Civil or Traffic Engineering plus a minimum of three years relevant work experience; Engineering in Training certificate required; must possess a valid driver's license; Professional Engineer License highly desirable. Salary: $43,022 - $62,675

Resumes/applications will be accepted until a suitable candidate is found. EEO M/F/H

Send to: CITY OF NASHUA
HUMAN RESOURCES DEPARTMENT
REFERENCE AD # 06-017
229 MAIN STREET
NASHUA, NEW HAMPSHIRE 03060
jobs@ci.nashua.nh.us

CONSULTING ENGINEERS

Traffic Engineer

- BS in Civil Engineering w/concentration in Transportation/Traffic
- 2-4 years experience in the following: traffic data collection, (turning movement counts, ATRs, sight distance, signal operations), coordination of traffic and site data collection needs, review and preparation of traffic impact studies for private, municipal and state clients, traffic analysis of various geometries and cross sections, including roundabouts, determining scope of work to complete traffic impact studies and corridor studies, experience with signal design a plus. Candidates with 4-7 years with the above experience, IMSA certification, P.E. and signal design experience also encouraged to apply.
- Strong knowledge of HCS, SYNCHRO & SIM-TRAFFIC software, AutoCad and Microstation platforms.
- Strong writing skills and ability to effectively present findings in both oral and written formats.

CLD – In our 29th year in business

- Work in our Manchester, NH office
- Provided a variety of interesting and challenging projects!
- Comprehensive benefits package
- Competitive salary

Qualified candidates, please contact Lisa King at CLD Consulting Engineers, Inc., 540 Commercial Street, Manchester, NH 03101 or via fax at 603-314-1080 or via email at lisak@cldengineers.com. Phone inquiries can be made to 603-668-8223 x 111. Visit our website at www.cldengineers.com! We are an Equal Opportunity Employer and encourage all qualified candidates to apply!

VHB Vanasse Hangen Brustlin, Inc.

MAKE YOUR MARK

Vanasse Hangen Brustlin, Inc., a leading national consulting firm specializing in transportation, land development and environmental services, is seeking our next generation of team builders for its dynamic Bedford, New Hampshire office. Immediate opportunities include:

TRAFFIC ENGINEERS/ TRANSPORTATION PLANNING

There are currently Traffic Engineering and Transportation Planning positions available which require experience ranging from 4 to 10 years. Candidates should have experience in traffic impact studies, corridor planning studies, conceptual roadway design, and traffic signal operations. Oral presentation and written communication skills are essential. A four year degree in Civil Engineering or Transportation Planning is required. EIT/PE or AICP desired.

Send or fax your resume in confidence to:

Human Resources Department
VHB/Vanasse Hangen Brustlin, Inc.
Kilton Road
Six Bedford Farms, Suite 607
Bedford, NH 03110-6532
Fax: (603) 644-2385
E-mail: lbussiere@vhb.com

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NHITE LEADERSHIP FOR 2005:

President Kevin R. Dandrade, P.E., P.T.O.E. Transportation Engineering + Construction, Inc. 65 Glenn Street Lawrence, MA 01830 Phone: (978) 794-1792 x145 Fax: (978) 784-1793 E-mail: kdandrade@tecmass.com	**Vice-President** Robert Bollinger, P.E., P.T.O.E. Vanasse & Associates, Inc. 10 New England Business Center Drive Suite 301 Andover, MA 01810 Phone: (978) 474-8800 Fax: (978) 688-6508 E-mail: rbollinger@rdva.com
Secretary-Treasurer Nicholas B. Sanders, P.E. Vanasse Hangen Brustlin, Inc. Kilton Road 6 Bedford Farms, Suite 607 Bedford, NH 03110 Phone: (603) 644-0888 Fax: (603) 644-2385 E-mail: nsanders@vhb.com	**Program Chair** Nicholas B. Sanders, P.E. Vanasse Hangen Brustlin, Inc. Kilton Road 6 Bedford Farms, Suite 607 Bedford, NH 03110 Phone: (603) 644-0888 Fax: (603) 644-2385 E-mail: nsanders@vhb.com
Membership Chair David J. DeBaie, P.E., P.T.O.E. Dufresne-Henry, Inc. 175 Canal Street Manchester, New Hampshire 03101-2335 Phone: (603) 669-8672 Fax: (603) 669-7636 E-mail: DDebaie@Dufresne-Henry.com	**Nominating Committee Chair** VACANT – Please contact Kevin if you are interested. This position does not require a significant time commitment.
Immediate Past President Joseph Lowry, P.E. The Louis Berger Group, Inc. 1001 Elm Street Manchester, NH 03101 Phone: (603) 644-5200 (x316) Fax: (603) 644-5220 E-mail: jlowry@louisberger.com	***Granite Chips* Newsletter Editor** LOOKING FOR VOLUNTEERS!!!!! Please contact Kevin if you are interested in assisting the NH Chapter

New Hampshire Chapter
~ITE~

MEETING NOTICE - NEW HAMPSHIRE CHAPTER OF ITE

FALL MEETING

Date: **Friday, October 14, 2005**

Location: NHDOT – Room 114
John O. Morton Building
7 Hazen Drive
Concord, New Hampshire

Please park in the parking lot adjacent to Hazen Drive

Program:

11:45 AM	Sign In
12:00 PM	Lunch (Brown Bags welcome!)
12:30 PM	Presentation

A Briefing on the NHDOT Traffic Management Center
- By Bill Lambert, NH State Traffic Engineer
Administrator, Bureau of Traffic, NHDOT

PDH Credit: 0.5 PDH is offered for this event

Cost: $10.00 per person (buffet lunch). Make checks payable to: NH Chapter ITE. Payment can be made either in advance or at the door. **There is no cost for attendees that choose to bring their lunch**.

Directions: FROM THE SOUTH: Take Rte. 93 N to Exit 14 in Concord. Turn right off the ramp; take a left onto Hazen Drive. Follow Hazen Drive for approximately 1/4 mile and you will see the NHDOT Building on the left. Proceed to the parking lot adjacent to Hazen Drive. The conference room is at the end of the main lobby.

FROM THE NORTH: Take Rte. 93S to Exit 14 in Concord. Turn right off the ramp; take a left onto Hazen Drive. Follow Hazen Drive for approximately 1/4 mile and you will see the NHDOT Building on the left. Proceed to the parking lot adjacent to Hazen Drive. The conference room is at the end of the main lobby.

Reservations: Please mail, email, or fax reservations, by **Thursday, October 13**, **2005**, to:

Nicholas Sanders, P.E.
Vanasse Hangen Brustlin, Inc.
Six Bedford Farms, Suite 607
Bedford, NH 03110-6532
Telephone: (603) 644-0888
Fax: (603) 644-2385
Email: nsanders@vhb.com

~~Please submit a separate form for each individual attendee~~

Would you like to receive a PDH Certificate for attendance at this function? _____

Name _____
(as it should appear on the PDH Certificate)

Organization _____

Address _____

City/State/Zip _____

Telephone _____

Email _____

Reservations cancelled after October 13th or No-Shows will be invoiced.

INSTITUTE OF TRANSPORTATION ENGINEERS

NEW HAMPSHIRE CHAPTER
ESTABLISHED 1992

NOMINATION FORM

To hold an elective office in the New Hampshire Chapter of the Institute of Transportation Engineers (NHITE), a NHITE member in good standing must be nominated by the Nominating Committee by September 30, or by Petition, filled out with the Secretary-Treasurer, no later than October 31. Elective offices include President, Vice President, and Secretary-Treasurer. The NHITE seeks qualified members to run for elective offices on an annual basis. If you are interested in running for elective office, please fill out this form and return to the Nominating Committee Chair or the Secretary-Treasurer.

Interim Nominating Committee Chair: (for nomination by Committee)	Kevin R. Dandrade, P.E., PTOE TEC, Inc. 65 Glenn Street Lawrence, MA 01843
Secretary-Treasurer: (for nomination by petition)	Nicholas B. Sanders, P.E. VHB, Inc. Kilton Road / 6 Bedford Farms, Suite 607 Bedford, NH 03110-6532

Nomination Type: □ By Nominating Committee □ By Petition

Nominee Information:

Name: _____

Organization: _____

Address: _____

Telephone:_____ Fax: _____

Email: _____

Office Sought: ☐ President ☐ Vice-President ☐ Secretary-Treasurer

Term Sought: Begins January_____ Ends January_____

Consent to Run:

I, _____ acknowledge that I am a member in good standing with the New Hampshire Chapter of the Institute of Transportation Engineers, and I hereby express my willingness and desire to faithfully execute the duties of an Officer of the Chapter to the best of my abilities.

_____ _____
Signature Date

Member Endorsements (five required for Nomination by Petition):

Name	Address	Phone	Signature
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____