In 1998, the Vermont Agency of Transportation (VTrans) adopted the VT Bicycle and Pedestrian Plan. One of the action steps identified in the plan for immediate implementation was the development of a pedestrian and bicycle facility design manual. As most transportation professionals are aware, the planning and design of pedestrian or bicycle facilities requires consultation with numerous resources such as the MUTCD, 1999 AASHTO Guide for the Development of Bicycle Facilities, a half dozen or so ITE publications, Americans with Disabilities Act Accessibility Guidelines and many others. One of the main goals of developing the Vermont Pedestrian and Bicycle Facility Planning and Design Manual is to provide "one stop shopping" for information on the planning and design of facilities for pedestrians and bicyclists.

The process of developing such a manual for VTrans began in 1999 with development of a Request for Proposals to enlist the help of a consultant in producing the Manual. VTrans hired the Middlebury, Vermont office of the National Center for Bicycling and Walking (formerly Bicycle Federation of America) in January 2000. Sub consultants include the Albany, New York office of Greenman-Pedersen Incorporated, the Rails to Trails Conservancy and Graphic Solutions to assist with the layout and illustration of the Manual.

One of the first steps in the process of developing the Manual was the formation of a 15-member multi-disciplinary project steering committee to guide the work of the consultant team. The committee included representation from throughout the VTrans organization including: the Bicycle and Pedestrian program, Rail, Planning, Project Development (Roadway Design and Structures) and Maintenance divisions. Additional representation came from municipal government, regional planning commissions, the consultant community, and FHWA. The steering committee provided valuable input to VTrans and the consultant team as a large volume of information was pared down in content and format to become a document that will be usable throughout Vermont. The steering committee met a total of 7 times between April 2000 and December 2001.

(Continued on Page 4)
**PRESIDENT’S MESSAGE**

The years ahead will be very challenging for our profession. While the economic slowdown has affected many of us adversely, the outlook for the types of services we provide will continue to increase. We need to get more young people involved in the profession, encourage people to constantly upgrade their professional credentials, and become more involved in policies that affect our profession. I was pleased to see that there were twelve candidates who took the recent PTOE exam in Brighton, Massachusetts.

**Random Thoughts --**

Our business is becoming more complex daily as we deal with substantial economic constraints, while maintaining a high level of public scrutiny on our work. Everyone demands the highest level of mobility, access, and safety, but the tradeoffs necessary to achieve each are substantial. Particularly in New England where land is at a premium, it is difficult to make substantial improvements that improve personal mobility. Forming partnerships with architects, environmentalists, and the public often means that related transportation enhancements take longer and are more costly than they used to be. We need to constantly keep people aware of the constraints on our ability to achieve major transportation improvements for every situation. We also need to fight hard to ensure that necessary transportation enhancements are not relegated to the bottom of the pile in terms of importance, especially with intersection capacity and safety improvements. With very few exceptions, congestion is increasing rather than decreasing on New England roadways; we simply have been unable to keep up with traffic demands. The heavy volumes on many collector and local streets occur simply because the capacity and/or spacing of arterials to handle the heaviest traffic demands is inadequate. ITS, traffic demand management, and public transportation alone are not going to solve regional traffic problems.

As this is my last message as President, I’d like to thank all the membership, the Executive Board, and the Committee Chairs and the District 1 leadership for making this year an outstanding one. Financially, the recent successful vote on District dues will benefit District 1 and NEITE membership with enhanced services for many years to come. NEITE membership growth remains strong.

I hope to see many of you at the December 2 meeting in Warwick, Rhode Island. We will have an excellent training course on transportation engineering liability as well as the annual dinner meeting, election of officers, and 2002 awards.

Gary Hebert
As we approach the Annual NEITE Meeting in Warwick, Rhode Island and the election of the section officers, it is the time of year for new opportunities and new challenges. As Editor this past year I have tried to introduce some new ideas and features to the CHRONICLE that cover a wide range of topics. The Agency Corner was included to demonstrate what is going on within each of the NE States. What I do not know is how you, the readers and members of the section like this section? Do you find it interesting or a waste of time and print space? I need to get some feedback on this and any other aspect of the CHRONICLE. In fact, I have not received one Letter to the Editor this past year, any takers?

To the extent of taking on new challenges, I continue my search for the next editor of the New England CHRONICLE. I appeal to the Senior NEITE Members to look at the junior staff within your firm for a potential candidate. The position is very rewarding and will be an excellent means for advancing one’s professional development. As I embark upon my duties as Director for the section, I will pledge to act as the assistant editor if it would make the job more manageable for someone. If you have an interest, give me a call. Enjoy!

Neil E. Boudreau, Editor
neil.boudreau@state.ma.us

The New England Section ITE Technical Committee has recently finished the second phase of the countdown pedestrian signal evaluations. The “before” and “after” data has been collected at each project location, and the next step is to break down and analyze the data. Once the results are analyzed, we hope to draw some conclusions as to the effectiveness of the countdown pedestrian signals on crossing behavior. The committee will draft up a summary paper documenting our findings and present this to the Boston Transportation Department. The committee will look to expand the study next spring to other areas where countdown pedestrian signal use is being considered. If you have a candidate location that you would like the committee to consider, please contact us.

Our focus for the near future involves developing a policy for the installation and use of Accessible Pedestrian Signals (APS) with the cooperation of the MassHighway Department. The latest version of the MUTCD provides guidance for the use of APS, but is focused primarily on the sight impaired. We will review the available literature on APS and bring in some guest speakers from the visually impaired community to get a better understanding of their needs. If you are interested in helping out with either study, please contact Committee Chairman Ken Petraglia at (617) 357-7700.

The New England Section Young Professionals Group (YPG) will meet during the Section’s Annual Meeting on Monday, December 2, from 4:30 pm to 5:00 pm. The full program and directions to the Annual Meeting in Warwick, Rhode Island will be sent out in a separate mailing.

The YPG is made up of people who have been NEITE members for 5 years or less. This informal meeting is your chance to find out what the YPG is planning for next year and meet some of your peers in the transportation industry.

The New England Section will present its Outstanding Young Engineer award at the Annual Meeting. This is one of only four awards presented each year by the Section, and recognizes contributions by a young member to NEITE and the transportation profession.

Whether you are new to the profession or new to the area, please join us for this brief get together, and stay for the meeting to show your support for this year’s award recipient.

For more information on the Annual Meeting or the YPG visit our website at www.neite.org.

If you have any questions regarding the Young Professionals Group or this meeting, please contact John Mirabito at (617) 951-6259 or jrmirabi@bigdig.com.
A big challenge in developing the Manual has been achieving the goal of a document that will be used not only by VTrans or on VTrans-funded projects, but also by the broader audience of municipalities, consultants and others on all bicycle and pedestrian improvements in Vermont. This has required a careful balance of technical and general information and limited the amount of hard-core engineering jargon. Another challenge was to develop design guidance that is sensitive to some of the unique characteristics of Vermont, while continuing to provide safe facilities and complying with applicable national design guidance.

The Manual is a comprehensive hands-on guide that addresses all types of pedestrian and bicycle facility planning and design. The Manual includes the following chapters:

1. Introduction
2. Planning for Pedestrians and Bicyclists
3. Pedestrian Facilities
4. On-Road Bicycle Facilities
5. Shared Use Paths
6. Rail-Trails and Rails-with-Trails
7. Traffic Calming
8. Signs, Pavement Markings and Signals
9. Landscaping and Amenities
10. Maintenance

A generous number of photographs and illustrations are used throughout the Manual to help clarify discussion in the text. A summary of the key concepts and design details for each chapter is included as a quick reference for engineers and planners.

From April to July of 2002, a series of 13 public outreach meetings was held around the state with the dual purpose of educating the public about the goals and content of the Manual and to solicit public input on the content. These meetings were held in conjunction with the state’s twelve regional planning commissions and one MPO. Meetings were also held for VTrans staff and a special presentation was made to the Vermont Center for Independent Living, an organization that advocates in Vermont for persons with disabilities.

A complementary product that is being developed in tandem with the Manual is a series of revised and new VTrans Standard Drawings. The standard drawings are used by designers to communicate project design details to contractors. The standard drawings are where the proverbial rubber (bicycle tire) of the Manual will meet the road (path). When the standard drawings have been approved by VTrans, they will be available on the Agency web site at www.aot.state.vt.us.

One way that the Manual is different from other transportation design manuals is its flexibility. The Manual often includes both minimum and preferred values for dimensions. There are only a handful of minimum dimensions that are proposed to require a formal design exception. One basic premise of the Manual is to provide information and factors to consider that will lead designers to make good decisions. Especially with pedestrian and bicycle facilities, every project is unique and no single design or dimension will be appropriate for every project. One example of where this type of guidance has been provided is on the topic of the need for protective barrier adjacent to shared use paths. Designers are provided with a number of factors to consider including: distance from path edge to top of slope, steepness of slope, vertical distance to bottom of slope, nature of hazard at the base of the slope, and slope material. Good old-fashioned engineering judgment is then used to
make the final call on whether barrier is needed or not.

So, when will the Manual be available? It is hoped that VTrans executive staff will endorse the Manual sometime early in 2003. It is anticipated that printed copies of the Manual and the new and revised standard drawings will be available in the spring of 2003. The public review draft version of the Manual is currently available on the VTrans web site and the final version will also be posted there.

RAIL TRAIL UNDER I-91 IN SPRINGFIELD

The VTrans Bicycle and Pedestrian Program staff is beginning to make plans for a series of training sessions on use of the Manual that will take place after it is released. For more information about the Manual or to get on the mailing list for the final version, contact Amy Bell, Bicycle and Pedestrian Coordinator at (802) 828-5799 oramy.bell@state.vt.us or Jon Kaplan, Assistant Bicycle and Pedestrian Coordinator at (802) 828-0059 or jon.kaplan@state.vt.us.

DISTRICT 1 CHAIRMAN’S MESSAGE

The transportation profession is evolving. We have seen new emphasis areas come into prominence: multi-modal facilities, intelligent transportation systems and traffic calming are examples. Some other changes may be lower profile, but still fundamental to the transportation profession.

Three key examples that come to mind; each example is a reference in wide use by transportation professionals: the American Association of State Highway and Transportation Officials A Policy on Geometric Design of Highways and Streets, also known as the Green Book (2001), the Federal Highway Administration’s Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), Millennium Edition (2001), and the Transportation Research Board’s Highway Capacity Manual (HCM, 2000). Many of the recent changes in the above documents are material and affect our day-to-day work.

The Green Book has changed the object height for stopping sight distance (SSD), has new discussion on how SSD and intersection sight distance (ISD) can be applied to intersections, and has revised values for ISD that are different than in previous Green Books. The MUTCD has changed its treatment of signal warrants in a number of ways, with possible substantive implications; these changes demand careful study. The HCM is full of changes, including some thoroughly revised methods.

Recognizing change is important to our service as transportation professionals. The Institute of Transportation Engineers (ITE), at all levels, including District One of course, is here to help. ITE offers many opportunities for continuing education and presentations at its meetings. ITE also gets the word out through publications including ITE Journal, TransTalk (New York Metropolitan Section newsletter), Interchange (the award-winning New York Upstate Section newsletter), New England Chronicle (the New England Section newsletter), and chapter newsletters.

One more thing: we should proactively evaluate changes to the standards we use and their potential effects on our profession. In this regard, ITE provides multiple forums for critical discourse, through the many means described above, through technical committees at various levels of ITE, and informally, colleague-to-colleague, at ITE activities. Enjoy ITE!

Kim Eric Hazarvartian, Ph.D., P.E., P.T.O.E
MASSACHUSETTS CHAPTER

The annual New England Section/Massachusetts Chapter joint meeting was held September 18, 2002 at the Best Western hotel in Waltham, Massachusetts. Over 100 professionals attended this year’s meeting, which was co-sponsored by ITS Massachusetts. The meeting consisted of a PTOE refresher course, two technical sessions: Sagamore Rotary Reconstruction and Innovative Parking Technology, presentation of the Tom Desjardins Memorial Scholarship, and John Cogliano, MassHighway Commissioner as keynote speaker.

NEITE President Gary Hebert and Ken Petraglia presented the New England Section’s Tom Desjardins Memorial Scholarship to Michele Langone, a student at Northeastern University. The Tom Desjardins Scholarship is presented annually to an undergraduate student enrolled in an engineering program.

Commissioner Cogliano spoke about the MassHighway’s current projects, including ITS deployment, and the future of the department. We also had a member of the National ITE leadership in attendance. We were fortunate that Richard Zabinski, International Director for District 1, was able to join us for the meeting.

Finally, the results of the election for the Massachusetts Chapter officers were announced at the meeting. The incoming officers are President – Fayssal Husseini, Vice President – Jim Terlizzi, and Secretary/Treasurer – Bill Bent. This is a talented executive board and they will do a fine job leading the Chapter. Thank you to all whose hard work made this year’s meeting a success.

NEW HAMPSHIRE CHAPTER

The New Hampshire Chapter of ITE is planning their Annual Dinner Meeting for December. Elections of Chapter Officers for 2003 calendar year will be held sometime this fall. Contact Joe Lowry, Chapter President for more information.

MAINE CHAPTER

The Maine Chapter of ITE will host a meeting on Wednesday, November 13th from 10:30 am to 1:30 pm at the Governor’s Restaurant in Waterville, ME. The topic of the meeting is the Augusta Bridge Projects, including the new third bridge and the replacement study for the Memorial Bridge. Annual Chapter dues of $5 are due at this meeting. Contact Stephen Landry for more information at Stephen.Landry@state.me.us.

UMASS AMHERST STUDENT CHAPTER

The student chapter at UMass-Amherst is twenty-seven strong this semester, including three undergraduates. We were sad to see Dr. David Noyce, student advisor, move back home to Wisconsin, however, we know that it is a great opportunity for him and we wish him well. We are happy to have Dr. Kitty Hancock as our new advisor. We are very excited about the upcoming semester - we have a good balance of technical, philanthropic, and social events planned. It was a pleasure for 10 students to attend the New England ITE meeting in September in Waltham, MA - the meeting proved to be a great opportunity for students, both for knowledge and networking.

Students recently had an opportunity for some "real-world" experience, assisting a local consulting firm with an origin-destination study in the Berkshires. Some students questioned motorists, while others videotaped license plates. Jane Sommer, from Smith College, recently visited one of our general meetings to assist students with cover letter writing and resume developing. On the social side, ITE students were guests at Mike Knodler's home for a pot-luck supper, and ITE partnered with ASCE on campus in early fall for a BBQ. Elections were held in early September, and we are happy to have the following: President - Daniel Dulaski, Vice President - Heather Rothenberg (formally public relations coordinator), Secretary/Treasurer - Lissandra Garay, Webmaster - Amitai Lipton (2nd year in this position), Photographer - Katy Shwert, Public Relations - David Camacho. Please visit our web site for a more detailed description of the Student Chapter: http://www.ecs.umass.edu/ite/
Transportation engineers may apply policies of the American Association of State Highway and Transportation Officials (AASHTO) as a guide to sight distance at unsignalized intersections. AASHTO considers stopping sight distance (SSD) and intersection sight distance (ISD).

SSD enables a major-road driver to perceive and react accordingly to a vehicle moving from the minor road to the major road. SSD provides for safety, and is fundamental to intersection operations. SSD should be available along the entire length of the road, not just at intersection approaches.

SSD at an unsignalized intersection facilitates vehicles moving from the minor road to the major road safely, with minimal slowing by major-road vehicles. SSD also provides for occasional events such as a vehicle moving from the minor road to the major road and then stalling. In this event, vehicles on the major road can stop if necessary.

ISD is typically greater than SSD and can enhance traffic operations; however, ISD is not required for safety. ISD can further reduce the need for major-road vehicles to slow as vehicles move from the minor road to the major road. In summary, SSD relates to safety, whereas ISD relates to improving operations.

The figure below shows representative design SSD and ISD for passenger cars on level grades, with ISD for left turns from the minor road under STOP-sign control. This information is only representative and does not substitute for an appropriate engineering study. Exceptions can apply and road jurisdictions may have differing policies.

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AGENCY CORNER

For comments, or to make a submission to the Agency Corner, please contact the Editor via email at neil.boudreau@state.ma.us or at (617) 973-8211.

Connecticut – It is the mission of the Connecticut Department of Transportation to provide a safe, efficient, and cost effective transportation system that meets the mobility needs of its users. Highlights of the “Connecticut Statewide Bicycle and Pedestrian Transportation Plan” include:

Vision: To enhance the bicycling and walking environment throughout Connecticut by providing for the safe, convenient and enjoyable use of these modes of transportation in an effort to meet the public’s demand for improved mobility and a better quality of life.

Any Connecticut resident will be able to walk, bicycle, or use other type of non-motorized transportation mode safely and conveniently from his or her home to any destination in the State. From any town, residents will be able to follow multiuse trails that are connected to other towns in the region, to other regions, and to neighboring states. Employment centers, shopping areas, bus and train centers, recreation and cultural attractions, and schools will accommodate the walking and bicycling needs of employees, customers, residents, both within the development and to nearby destinations.

Goals: Provide a statewide multi-use trail system that is integrated with other transportation systems. Provide and maintain a safe, convenient and pleasing bicycle and pedestrian environment. Encourage and support bicycle/pedestrian safety, education and enforcement programs. To make full use of state resources in providing technical assistance to towns and municipalities relative to the development of multi-use trail facilities throughout our state.

Massachusetts – An update on the Central Artery/Tunnel Project. The focus of the Big Dig project has narrowed to the manufactured "land" that will soon cover the buried highway in Boston's downtown. While many decisions have been made about the future of this corridor, a few remaining parcels have inspired a long debate about the character, purpose, control, and management of these highly visible civic spaces. The parcel areas that are available for development are as follows:

Bulfinch Triangle: Blocks of new buildings will fill in a restored cluster of streets recalling a district laid out by Boston’s first architect.

North End: Several parcels will be filled with mixed-use buildings complementary to Haymarket and the North End, along with structures to hide ramps and ventilation shafts, and provide parking.

Wharf District: Planners have eyed the area from Columbus Park to the Financial District as an opportunity to build new connections between the waterfront and the rest of the downtown.

20th Century Downtown: Three downtown parcels are slated for an ambitious plan by the Massachusetts Horticultural Society to create a world-class "garden under glass."

Chinatown/Leather District: This space will be an important neighborhood amenity for residents of Chinatown and the adjacent Leather District.

Maine – Safety Management High on MaineDOT Agenda. Established in response to a 1991 federal mandate, the Department’s Safety Management program, housed in the Systems Management Division of the Bureau of Planning, continues to innovate as it administers a growing number of Department safety efforts. The Safety Management Section’s mission is to develop a comprehensive approach to reduce the frequency and severity of crashes on Maine’s transportation system. Federal Highway Administration (FHWA) funds support much of the safety team’s programming. Highway safety is an increasingly important public policy concern for Maine. The number of highway crash fatalities in Maine this year is significantly higher than it was at this time a year ago. FHWA estimates that the cost of highway crashes, mainly in lost productivity, exceeds $1 billion per year for the Maine economy. Among the programs and initiatives of the Safety Management Section are:

• Planning – The Safety Management Section plays the key role in developing the safety aspects of the Six-Year Transportation Improvement Plan and the Twenty-Year Plan, the Department’s main planning
Agency Corner (continued from previous page)
documents. Staff subsequently prioritizes and recommends specific improvements for the Biennial Transportation Improvement Program.

• Hazard Elimination Program (HEP) – The HEP is a federally funded highway safety program that addresses locations with high frequency and severity of crashes, where road geometry or traffic control are contributing factors. The program provides a total of $4.9 million per biennium to address a number of highway safety improvement projects, (generally costing less than $500,000).

• Guardrail Improvements - The Department has dedicated $1 million of HEP funds per biennium in recent years to improving guardrails. Guardrail treatments on the most important “National Highway System” roads are nearly complete. MaineDOT will now move on to the needs on the next-higher level of highways.

• Grade-Crossing Improvements - In line with a federal requirement, Safety Management devotes $2 million of federal aid per biennium to safety improvements at highway-railroad intersections. The program funds purchases of safety equipment such as warning lights and barriers, as well as the construction of surface (road) improvements at the railroad crossings.

• Safety Incentive Funds Program – Through compliance with federal requirements for drunk driving laws and other policy objectives, Maine secures funding for innovative efforts like bicycle safety training, a media safety campaign, driver activated signs, flagger training, and other nontraditional safety programs. The Department shares these funds with the Department of Public Safety.

New Hampshire – The New Hampshire Department of Transportation (NHDOT) has issued a notice to contractors: Work zone traffic control devices to be crashworthy. Beginning January 1, 2003, all work zone traffic control devices in Categories I, II and III, except existing concrete barrier that transfers tension and moment from segment to segment, utilized on any NHDOT project shall conform to the testing and evaluation criteria of the National Cooperative Highway Research Program (NCHRP) Report 350. Portable concrete barrier (new NHDOT design) cast after October 1, 2002 shall meet all the testing and evaluation criteria of NCHRP Report 350. Category I work zone devices consist of plastic or rubber cones, tubular markers, flexible delineators, and plastic drums with no lights, batteries, signs, etc. added. Category II examples are devices weighing less than a total mass of 99 pounds (45 kg), and include such items as barricades, construction signing, portable sign supports, intrusion detectors/alarms, and drums, vertical panels, or cones with lights. Category III consists of devices weighing greater than 99 pounds (45kg); some examples are truck-mounted attenuators (TMA’s), portable crash cushions, and portable concrete barrier. Category IV devices consist of flashing arrow panels, changeable message signs, and portable traffic signals; the implementation date will be made by FHWA in October 2003. All work zone traffic control devices shall also conform to the current edition of the MUTCD, and NHDOT Standard Specifications, as amended. A Certificate of Compliance, accompanied with a copy of Federal Highway Administration (FHWA) Letter of Acceptance, shall be provided stating that the traffic control devices provided meet the testing and evaluation criteria of NCHRP Report 350. Some samples of Category I and Category II devices will be on display in the Front Lobby of the NHDOT John O. Morton Building, Hazen Drive, Concord.

Rhode Island – The future of transportation is here. That future involves the installation of technology as part of an overall strategy to reduce the impacts of congestion and provide for hassle-free traveling.

Consider for instance heading to work knowing you are taking the quickest path given current traffic conditions. How would you like to be assured that busses, trains, and planes are keeping to schedule? These things and more are all possible and are happening now through Intelligent Transportation Systems, or ITS for short.

Today, in Rhode Island, we have taken a big step towards realizing the ITS vision for managing transportation. Thanks to technology you can now access roadway information by opening your
Internet browser and viewing camera images in the greater Providence Metropolitan area.

As the Rhode Island ITS program evolves, we will be adding more cameras to outlying areas, installing overhead dynamic message boards that can be updated from the Transportation Management Center as soon as conditions change. A national 511 direct information number (soon to be established in Rhode Island) will eventually offer travelers and commuters real time information about bus, train, and plane schedules while providing information on roadway incidents that have the potential to create delays. The maritime industry is exploring ways to better locate and schedule ships. Commercial vehicle operators are linked together to receive vital information concerning roadway conditions that may require trucks diverting to alternate routes to ensure the delivery of goods and services.

ITS makes many things possible. In combination with an improved roadway infrastructure, ITS will save time, money, and lives, while offering a promising solution to the pressing problem of congestion.

Vermont – The Vermont Agency of Transportation was the recipient of a "Smart Growth" award presented by the American Association of State Highway and Transportation Officials (AASHTO) at its annual meeting held recently in Anchorage, AK.

Vermont was cited for its western transportation corridor initiative which examines multiple highway, rail, and bike-pedestrian projects as part of a single, multi-modal corridor running parallel to Route 7 on the western side of the state.

The competition, titled Smart Moves: Transportation Strategies for Smart Growth, was sponsored by AASHTO, in cooperation with the Federal Highway Administration and the U.S. Environmental Protection Agency. Vermont was one of seven states and the District of Columbia receiving Smart Growth Awards. Some 21 states submitted 32 applications for the awards.

"The winning projects generate a sense of pride and enthusiasm for those involved, and provide terrific models for other communities to consider and emulate," said John Horsley, AASHTO Executive Director. "Smart growth is a key component to solving today's challenge of providing mobility, creating vibrant communities, and preserving our natural resources."

In announcing the award, AASHTO officials cited Vermont's recognition that too often projects are developed in isolation and, by considering projects as a piece of a multi-modal corridor, planners are able to maximize opportunities for intermodalism and smart growth, and are able to ensure that projects will be complementary as opposed to competitive.

A number of projects are underway, including the Champlain Flyer commuter train between Burlington and Charlotte, a new passenger train station and intermodal center in Rutland, and track improvements to support future rail passenger and freight service between Bennington and Burlington.

Together, these initiatives comprise a comprehensive approach to transportation planning and a case study in regional cooperation, noted AASHTO officials. The idea of corridors enables planners to consider a variety of commercial land uses from a regional perspective by relating them to the transportation infrastructure that will support them.

Vermont Transportation Secretary Brian R. Searles, in accepting the award, praised the efforts of Matthew Sternberg of the Rutland Redevelopment Authority and others who have participated in the western corridor project.

** MARK THIS DATE **

NEITE ANNUAL MEETING
Monday, December 2nd 2002
Crowne Plaza Hotel, Warwick, RI

Full Day Workshop
"Roadway Issues and Tort Liability"

Technical Session
"New Haven Harbor Crossing Q Bridge"

Election Ballots are Due on or before Dec. 2nd
In 2001, seat belt use in the fifty states, the District of Columbia, and Puerto Rico continued the general pattern of increase seen since use was first measured. All but three states reported use rates, which ranged from 52.3% in West Virginia to 91.1% in California. Rates were obtained using observational surveys that meet standards set by National Highway Traffic Safety Administration (NHTSA) to ensure consistent estimates of high quality. Use continues to be higher in states that can enforce belt laws more strictly. State seat belt laws vary in terms of the vehicles and seating positions to which they apply and the fines that may be levied. Primary enforcement of seat belt laws allows police to stop and cite motorists simply for not wearing seat belts. Under secondary enforcement, motorists must be stopped for another reason in order to receive a seat belt citation. Belt use was estimated to be 78% in primary states and 67% in secondary states in 2001.

No states switched from primary to secondary enforcement or vice versa in 2001. There continue to remain 17 states with primary enforcement of laws for front seat occupants of passenger vehicles, 32 states with secondary enforcement of such laws, and one state (New Hampshire) in which it is legal for occupants 18 and over to be unbelted. It is estimated that if all states had had primary laws in 2001, an additional 2,000 lives would have been saved, on top of the 12,000 that were saved. The best measure of improvement in belt use is the conversion rate, which is the rate of decrease of belt nonuse from one year to the next. For instance, belt use in Alabama increased from 70.6% in 2000 to 79.4% in 2001. If one thinks of 70.6% of Alabama’s population as belt “users”, and its remaining 29.4% as “nonusers”, then the nonusers decreased from 29.4% in 2000 to 20.6% in 2001, a 30 percent reduction. That is, Alabama “converted” 30% of its population that was not using belts in 2000 to use belts in 2001. According to NHTSA’s Motor Vehicle Occupant Safety Survey, most people are part-time users. However the use/nonuse categorization is helpful for illustrating conversion rates. Nationally, about 8.5% of nonusers are converted to users each year.

Conversion rates are negative when belt use decreases. For instance, Arizona’s observed belt rate decreased from 75.2% in 2000 to 74.4% in 2001. This corresponds to a 3% increase in “nonusers”, from 24.8% nonusers in 2000 to 25.6% in 2001. That is, Arizona decreased its nonuser rate by –3%. Declines in observed belt use may correspond to actual declines in use or may be due to sampling error.

The rates in Table 1 (Page 12) are the best measures of belt use at the state level. In order to gather this information efficiently, states are allowed to employ certain cost-saving measures that might result in slight overestimates of use: States may omit up to 15% of their lowest-population areas and are allowed to collect data at intersections that are controlled by stoplights or stop signs. Because higher population areas and controlled intersections tend to have higher belt use, these measures might result in slightly inflated estimates of use. In addition, states are allowed to conduct multiple surveys meeting the standards set forth by NHTSA in Section 157 of Title 23, United States Code at any time in the calendar year and report the highest use rate. Consequently the rates in Table 1 might represent usage from different times of the year in different states. In particular, state rates might be conducted during or immediately following a major campaign to increase belt use through, e.g., increased enforcement of and advertisement of seat belt laws. The National Occupant Protection Use Survey (NOPUS) is a national observational survey that doesn’t employ the cost-saving restrictions that the states may, and is conducted at least two weeks after any major belt campaigns. Consequently NOPUS provides the best measure of the belt use at the national level. For practical reasons, both NOPUS and the state surveys are conducted during day light hours and observe shoulder belt use of drivers and right front seat passengers, and so both might overestimate belt use. Additional information, such as belt use by various demographic categories or child safety seat use, may have also been collected in the state belt surveys. This information may be obtained by contacting the state highway safety offices or NHTSA regional offices.
New England Chronicle

**JOB POSTINGS**

A growing transportation/civil engineering and planning firm located in the greater Boston region and conducting projects throughout New England has immediate openings for traffic engineers and transportation planners with 2 to 6 years experience. Candidates must hold Bachelors in civil engineering, (Masters degree desirable), planning or related field, have their EIT/PE or equivalent and meet minimum requirements as follows:

**Traffic Engineers** - Experience is needed in highway capacity analysis, safety studies, impact and access studies, parking analysis, traffic calming, and traffic signal operations/design.

Should have experience with software such as HCS, SYNCHRO, SimTraffic and CORSIM

**Transportation Planners** – Experience in conducting various types of traffic studies including impact, corridor management, TDM and long range planning. Bachelor’s degree in civil engineering, planning or related field. Masters degree desirable. Experience should include travel demand modeling methods and working with software such as TModel, TransCad, etc.

Good writing and speaking skills are essential. Interested candidates should send qualifications letter, resume, transcript and sample of work to:

MS Transportation Systems, Inc., P.O. Box 967, Framingham, MA 01701
Fax: 508-620-6897 Email: msinatick@earthlink.net

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</table>

* No rate reported.
** Rates in primary enforcement states are in boldface.
# Switched from secondary to primary enforcement in April 2000.
## Switched from secondary to primary enforcement in May 2000.

Source: State belt use surveys conducted in accordance with section 157 of title 23, United States Code.
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Vice President
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mkeabend@aol.com

New England Chronicle
ANNOUNCEMENTS

New England Section
Institute of Transportation Engineers
Annual Meeting

Date: December 2, 2002
Location: Crowne Plaza Hotel, Warwick, RI

Schedule:
8:30 AM – Workshop Registration
9:00 AM – Roadway Issues & Tort Liability
12:00 PM – Board Meeting
3:30 PM Technical Session
   New Haven Harbor Crossing Q Bridge
4:30 PM – Cocktail Reception
6:30 PM – Annual Dinner & Meeting

Cost: $50 Private / $200 Workshop & All Meals

Register: Bill McNamara, Ocean State Signal Co.
Phone: (401) 231-6780
Fax: (401) 231-4930
Email: billmc@oceanstatesignal.com

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The website contains valuable links and information about upcoming events, NEITE chapters and Section news.
Visit the Section online today!

Upcoming Events

<table>
<thead>
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<th>Date</th>
<th>Location</th>
<th>Event</th>
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<tr>
<td>December 2, 2002</td>
<td>Warwick, RI</td>
<td>Workshop: Roadway Issues and Tort Liability</td>
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<tr>
<td>December 2, 2002</td>
<td>Warwick, RI</td>
<td>NEITE Annual Meeting &amp; Dinner Banquet</td>
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<tr>
<td>May 7-9, 2003</td>
<td>Rochester, NY</td>
<td>ITE District 1 Annual Meeting</td>
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NEW ENGLAND CHRONICLE
Institute of Transportation Engineers
New England Section
c/o Neil E. Boudreau, Editor
Massachusetts Highway Department
10 Park Plaza, Room 7210
Boston, MA 02116-3973

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