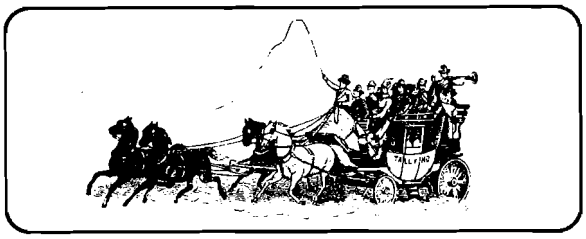
M A S S

INTERCHANGE

VOLUME 5 NUMBER 1 SEPTEMBER 1990

ROADSHOWS REACHING THE UNREACHED

The Baystate Roads Program exists in order to help the local communities in Massachusetts provide safe and efficient highway services. We offer assistance mainly through workshops, by visiting communities, and by the distribution of videotape and printed materials. One measure of how useful the services we offer are is the extent to which they are used. Shown below are graphical summaries of the extent to which communities have availed themselves of the several services we offer.



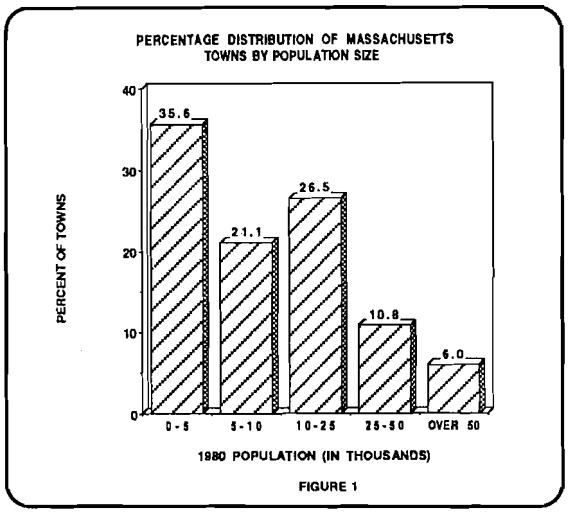


FIGURE 1

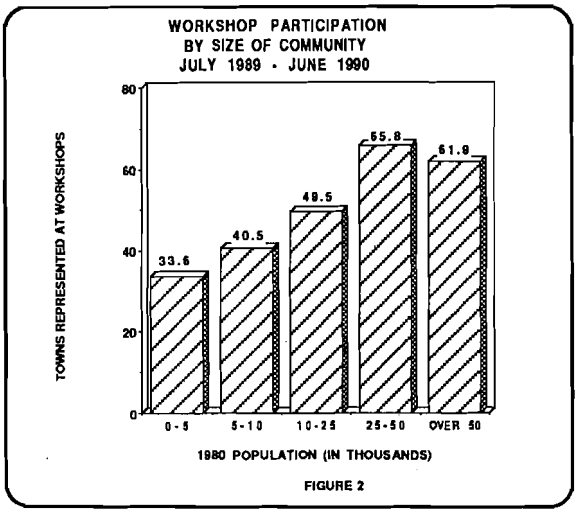


FIGURE 2

Figure 1 is just a reminder of how the cities and towns in the Commonwealth are distributed by population size. The largest single group, by far, comprises those small towns of less than 5000 population; the smallest group is made up of our larger communities, those of 50,000 population or more. Looking next at workshop participation, Figure 2, we see that, although the smallest towns (less than 5000) represent the largest percentage of communities, they participate proportionately much less in the Baystate Roads Workshop program than do larger communities. Only about one-third of towns under 5000 have attended a workshop in the last year; over sixty percent of the largest communities have attended.

Recognizing the difficulty that smaller communities have in sending people to workshops, Baystate Roads initiated a "Roadshow" program late in February of this year. If folks couldn't (or wouldn't) come to us, we would go to them. In the first four months of this program, highway personnel from twelve towns have been served, either in their own highway garage, or as visitors in a neighboring town's garage. As will be seen in Figure 3 (page 2), the smallest towns, those which are least likely to send people to workshops, are those which have participated in the Roadshow program.

Not only have Roadshow visits tended to serve the smaller communities, they also have reached highway

personnel, who are typically underrepresented at workshops. As can be seen in Figure 4, Highway Superintendents are by far the largest single group served by the Workshop program.

Turning to our third major mode of technology transfer -- distribution of printed and video material -- we see in Figure 6 that the larger communities are more likely to request printed information than are the smaller communities. Fully one-third of communities over 50,000 population requested printed information

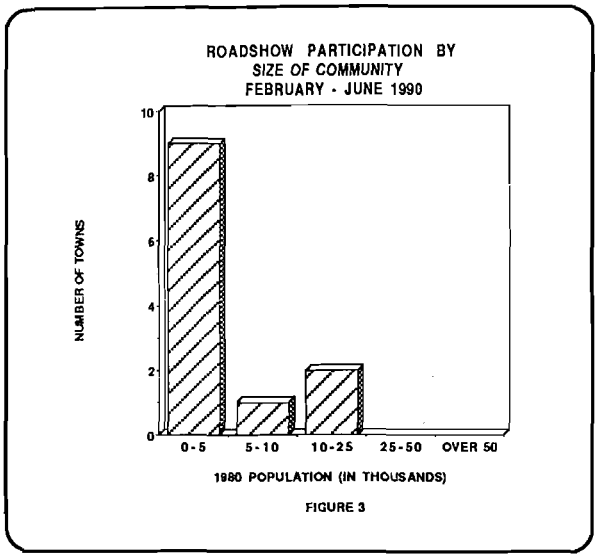


FIGURE 3

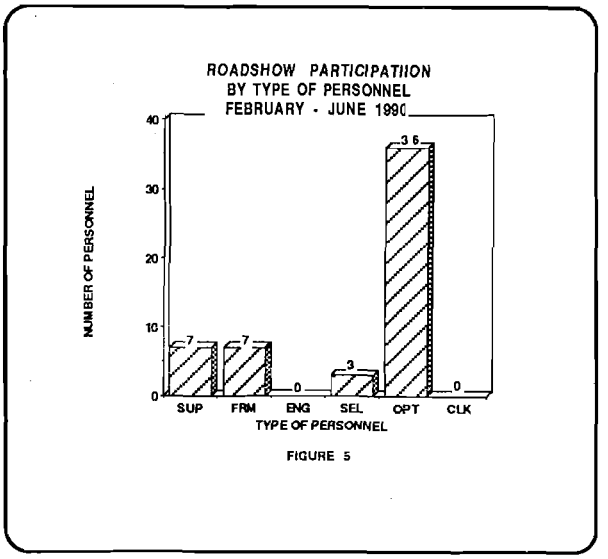


FIGURE 5

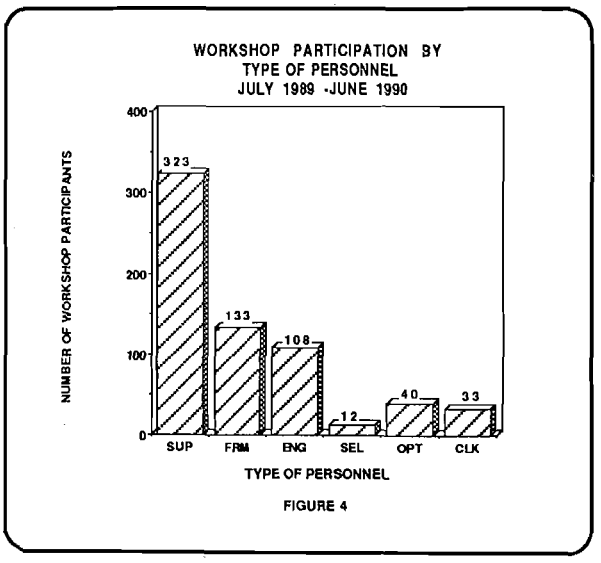


FIGURE 4

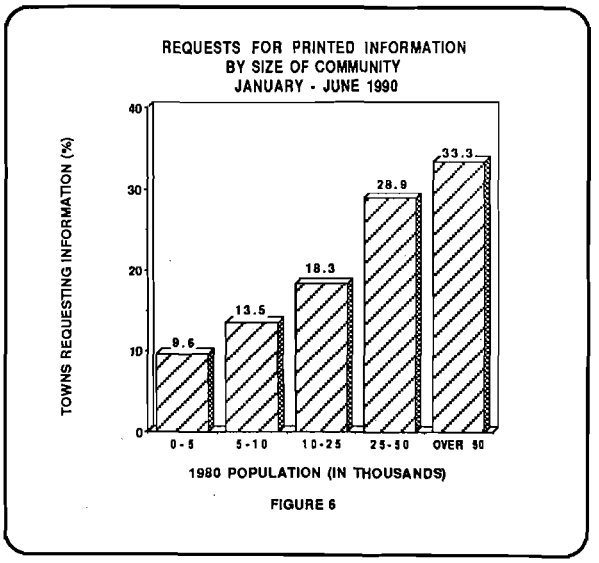


FIGURE 6

in the six-month period represented by Figure 6, while less than two percent of the smallest towns requested such information in this same time period.

A similar comparison of videotape requests, Figure 7, shows that towns appear to make much less use of this medium than of printed material and that there is little difference among towns of different sizes in their propensity to request videotape materials.

In summary, it appears that workshops have been an effective means of reaching cities and towns in Massachusetts of all sizes. Over the one year period, January 1, 1989 through December 31, 1989, almost one-half of our communities participated in a Baystate Roads workshop; many communities typically send representatives to several workshops during the year. Although many communities participate in the Workshop program, a significant proportion of the smaller towns do not. To some extent this problem has been met by bringing "mini-workshops" out to these towns, an effort that also serves to reach equipment operators, who do not typically attend workshops. And finally, the third mode of technology transfer -- disseminnation of printed and video tape material -- has reached over twenty percent of all communities in the Commonwealth during the first six months of 1990. All programs considered, we have made a good start, but we still have a long way to go.
(see Figure 7 on Page 3)

(Continued from page 2)

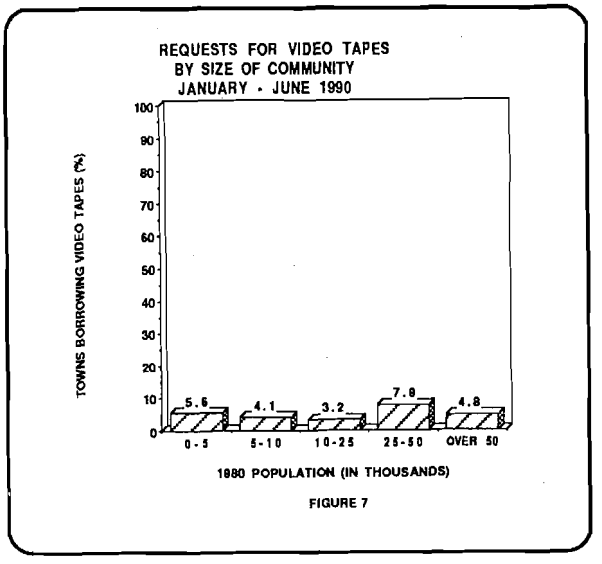


FIGURE 7

Article contributed by Dr. Paul W. Shuldiner, Baystate Roads Program Director.

ROADSHOW UPDATE

As mentioned in the Spring, 1990 *Mass Interchange*, The Baystate Roads Program has started going on the road to cities and towns to conduct training. To date, three roadshows have been conducted, one in each town, in Webster, Westhampton, and Florida. Coordination visits have been made to Chester and Shrewsbury.

As the prime construction season draws to a close, it is an excellent time to start planning fall and winter maintenance and operations. If you would care to include a session of the roadshow as part of your training program, just give us a call and we will try to schedule a mutually convenient time. It's going to become increasingly more difficult to schedule as the year draws to a close, so please schedule early for best availability. Remember, the only requirements for the town or city are to provide a room with an outlet, and some personnel to participate. Baystate Roads Program will privide videotapes, tape player, and instructor, at no cost to the town.

IN THIS ISSUE

TOWN RESPONSIBILITY FOR COUNTY ROADS

Kopelman and Paige, P.C., Attorneys at Law, is a Boston Legal firm which represents several municipal clients. The following article was a memorandum of July 20, 1990, which was sent to the Baystate Roads Program for inclusion in *Mass Interchange*. The Baystate Roads Program would like to extend its gratitude to Leonard Kopelman for an informative and timely article.

MEMORANDUM TO MUNICIPAL CLIENTS

TO: BOARD OF SELECTMEN
TOWN MANAGER/TOWN ADMINISTRATOR/
EXECUTIVE SECRETARY

RE: TOWN RESPONSIBILITY FOR COUNTY ROADS

We have received a number of inquiries as to the responsibility of towns for maintaining county roads. The issues raised in this regard generally fall into three categories: 1) who has jurisdiction over county roads and who has responsibility for their maintenance; 2) can a town be compelled to repair a county road, and if so under what time frame; and 3) what liabilities if any, does a town incur for injuries which may occur on such roads.

Jurisdiction and Maintenance

Pursuant to G.L. c.82, section 1, the County Commissioners have the authority to lay out county roads or public highways that lead from "town to town" or from "place to place within the same town". Inhabitants of Monterey v. County Commissioners of Berkshire, 61 Mass. 394, 399 (1851). Additionally, the County Commissioners have the authority to alter, make specific repairs or discontinue an existing highway that leads from "town to town" or from "place to place within the same town".

Once a county road has been established, each town has a duty to maintain that portion of the road within its town limits so that it is "reasonably safe and convenient for travelers". B.L. c.84, section 1; Inhabitants of Braintree v. County Commissioners of Norfolk, 62 Mass. 546, 548 (1857). Thus, in my opinion, each town has the responsibility to maintain that portion of the road within its town limits.

Town Maintenance Requirements

The County Commissioners have continuing authority to require towns to repair or alter county roads once they are established. The Commissioners may order specific repairs with construction dates. G.L. c.82, section 8. The costs are apportioned by the Commissioners among the Towns in which parts of the way are located. If a town refuses to pay, the county may issue a warrant against the delinquent town for expenses and charges incurred. G.L. c.82, section 15. In addition, regardless of specific repairs ordered by the Commissioners, the town has the duty and liability to keep county roads "reasonably safe and convenient for travelers". G.L. c.84, section 1.

Town Liabilities

Each town has the responsibility to use reasonable care and diligence in discovering and repairing defects in county roads, G.L. c.84, section 15, and keeping the roads "reasonably safe and convenient for travelers". G.L. c.84, section 1; Whalen v. Worcester Electric Light Co., 307 Mass. 169 (1940). In my opinion, the town may incur additional liability in limited circumstances under common law negligence if the town is acting as a commercial enterprise, such as a water department, D'Urso v. Methuen, 338 Mass. 73 (1958), or if the town is found liable for a wrongful death. Gallant v. Worcester, 340 Mass. 267 (1960). However, a town is free to contract with others to have repair and maintenance work performed. Perry v. Planning Board of Nantucket, 15 Mass. App. Ct. 144, 157 (1983). A town may also request that the County Commissions aid in the town maintenance of certain county roads. G.L. c.84, section 11A.

If a private individual agrees to repair and maintain a county road, a town may allow the work to be done, or may attempt to collect funds from the county in the event that the individual fails to perform the work. In all cases, however, it appears that the town has the ultimate responsibility to ensure that the road remains safe and convenient for travel, and the town would be held liable for injuries resulting from road defects.

BRIEFS

The Baystate Roads Program has received copies of an American Association of State Highway and Transportation Officials (AASHTO) Informational Guide, titled *"A Guide for Erecting Mailboxes on Highways"*. This pamphlet and a videotape, "Mailboxes May Be Hazardous to Your Health" (ST-131), both deal with improving the safety aspects of having mailboxes erected in the area immediately adjacent to the roadway. Data suggests that 70 to 100 people die annually in the U.S. in vehicles which strike mailboxes where the design of the mailbox, or its support, can be shown to have contributed to the severity of the accident.

The typical mailbox installation, consisting of a light sheet metal box mounted on a 4 X 4 inch wooden post, or a 1 1/2 inch diameter light guage pipe, is not a serious threat to motorists. It is the massive structures such as the masonry columns, railroad rails and ties, tractor wheels, plow blades, concrete filled barrels, etc., which are sometimes used to support mailboxes that turn single mailboxes into lethal roadside obstacles. These should be avoided.

The typical grouped or multiple mailbox installation is also a serious threat to the unfortunate motorist who strikes it. This installation consists of two or more posts supporting a horizontal member, usually a timber plank which supports the group of mailboxes. The horizontal members in these installations are poised at windshield height and when struck have impaled or decapitated motorists.

Injury resultant from striking a mailbox is not the only risk associated with mailboxes. The postman's maneuvers in collecting and delivering mail and the patron's activities, as pedestrian or motorist, in depositing and collecting mail, create opportunities for traffic conflict and human error.

If you would care to read the guide or see the video, just give us a call.

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The Baystate Roads Program has just reviewed an FHWA videotape (MO-110) and accompanying publication entitled *"Guidelines for Spring Highway Use Restrictions"*. This very informative tape deals with the imposition of weight restrictions during the spring thaw period. It is recommended for use where: 1) surface is 2-4 inches thick, 2) base is 6-12 inches thick, 3) subgrades are silt or clay.

The system is based on freezing and thawing indexes. It is based on a system developed by Washington State. It is a very easy system to use, with only the daily high and low temperatures required. This report states that potential pavement life increases could be 62% for a pavement load reduction of 20% and as much as 88% life increase for a reduction of 40%. Now is the time to plan implementation of this program. If you are interested in getting either the videotape (MO-110) or the *"Guidelines"* pamphlet, just give us a call.

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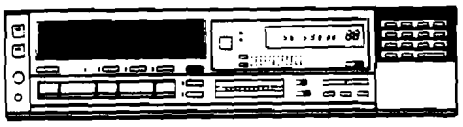
A new Baystate Roads Videotape Lending Library acquisition, "Pavement Management Systems for Local Administrators - 1990" (DOT/FHWA), presents concepts, benefits and costs of pavement management This includes: locating pavements which are in need of repair, when repairs are required, what repair methods are appropriate, and the need of highway personnel for guidance from elected officials on the level of budget availability as well as the desired quality of roads by the community.

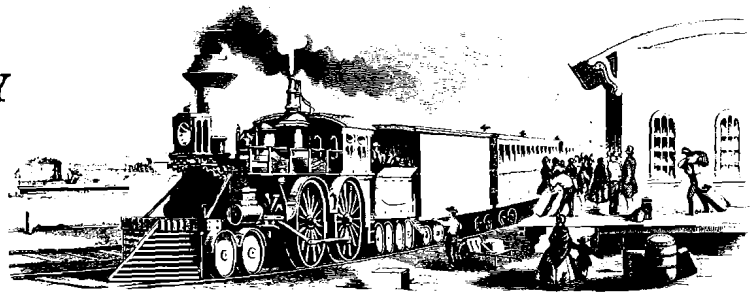
It covers the components of pavement management systems -- topics such as: highway inventory, pavement condition survey, analysis of repair needs, prioritization of needs, strategy and cost analysis.

The goal of all pavement management systems is to secure the greatest return on the money invested. The benefits of the system are: 1) objective survey of existing conditions, 2) objective means of selecting projects, 3) objective evaluation of options, 4) cost effectiveness is optimized by selecting optimum timing and most effective strategy, 5) pavement predictions allow multi-year planning, 6) budgets are prepared from pavement management systems, which informs administrators of budgetary needs, 7) improved communications between sectors of Departments of Public Works.

Discussed are the advantages and disadvantages of 1) purchasing an existing system, 2) developing an in-house system, and 3) hiring a consultant.

VIDEOTAPE LENDING LIBRARY





NEW ACQUISITIONS

Videotapes of three workshops presented by the Baystate Roads Program are available:

☆ "Traffic Signs and Markings" 22, 23 & 24 May

☆ "Pavement Rehabilitation Alternatives" 5, 6 & 7 June

☆ "Computer Basics" 26, 27 & 28 June

☆ DC-131
"Breakaway Timber Utility Poles"

☆ DC-132
"Design Features in Mitigating Highway Construction Impacts on Streams"
"Brown Trout, Yellow Bulldozers and Black Top: The Story of Ten Mile Creek"
"Franconia Notch Parkway"
"Highways and Environment: Southern Tier Expressway-Salamanca, NY"

☆ MO-174A
"Equipment Operation & Maintenance"
"Motor Grader Operation" Part 1, 2, 3
"Motor Grader Operation and Preventative Maintenance"
"Loader Operation" Part 1, 2 and
"Preventative Maintenance" A, B

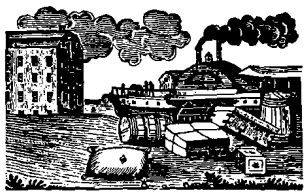
☆ MO-174B
"Weed Sprayer" Part 1, 2
"Dump Truck Operation" Part 1, 2, 3, 4
and "Preventative Maintenance"

☆ MO-174C
"Crane Operation"
"Forklift Operation and Preventative Maintenance"
"Winch, Auger, Bucket Operation"
"Rotary Mower Operation: 1, 2 and Preventative Maintenance"

☆ MO-174D
"Straight Blade Snow Plows" Part 1, 2
"Highway Sanders"
"Highway Sander Calibration"
"Crack Sealer Operation" Part 1, 2
"Tar Pothole Operation"
"Bulldozer Preventative Maintenance"

☆ MO-174E
"Highway Maintenance Overview"
"The Flagger"
"Traffic Center Work Areas"
"Traffic Control in Moving Operation"
"Traffic Control in Maintenance Work Areas"

☆ MO-174F
"Routine Structure Clean-Edge Rut Repair"
"Maintain Drainage"
"Remove Minor Slides & Clean Ditches"
"Guardrail Repair"
"Mowing, Chemical Control of Vegetation"
"Plow Snow & Salt" Part 1,



☆ MO-174G
"Patching with Hand Tools and Maintaining Non-Hard Surfaces"
"Permanent and Temporary Pothole Patching"
"Sealing Cracks, Bituminous Seal" Part 1, 2
"Bituminous Surface Repair"
"Lane Level Bituminous Surfaces"
"Base Repair"

☆ MO-174H
"Tow Type Sweeper Operation and Preventative Maintenance"
"Pneumatic Tire Roller Operation"
"Roller Preventative Maintenance"
"Steel-Wheel Roller Operation"
"Structures Inspection"

☆ MO-174I
"Maintenance Supervisor's Responsibilities"
"Patch Portland Cement Concrete With Portland Cement Concrete"
"Patch Portland Cement Concrete With Bituminous Materials"
"Portland Cement Concrete Joint Sealing"

☆ MO-175
"Pavement Management Systems For Local Administrators-1990"
(See description on Page 5.)

☆ MO-179
"Calcium Chloride - Full Depth Reclamation"
"Calcium Chloride - Dust Control"

☆ ST-131
"Mailboxes May Be Hazardous To Your Health"
(See description on Page 5.)

GOVERNOR'S HIGHWAY SAFETY BUREAU
FUNDING ASSISTANCE PROGRAM FOR 1990-1991

The Governor's Highway Safety Bureau administers a local road safety funding program under which cities and towns in Massachusetts may qualify for assistance in purchasing various types of road safety equipment. Under federal guidelines, communities may receive funding assistance provided that they have identified a valid traffic safety problem, and have developed a plan to address the problem.

The following is a list of the most commonly sought projects eligible for funding reimbursement in this federal aid program.

Work Zone Protection Kits

The purpose of this program is to provide increased safety in road construction/maintenance areas. Traffic cones, warning signs, safety vests, portable barricades, and arrow boards are typically part of this equipment. Personal items such as boots, gloves and rain gear are not eligible.

Pavement Stripers

An application for this type of equipment should include a description of the particular type of striper needed, along with a list of crosswalks and/or streets to be striped and approximate footage involved. Adhesive striping and other pavement markings are also eligible. No reimbursement can be made for paint.

Warning and Regulatory Signs; Breakaway Supports

1. There must be a systematic program in the city or town to bring all signs into compliance with the MUTCD.

2. Permits must have been obtained for signs which require them and all sign regulations must be effectively enforced.

3. Signs must be used on roads which are off the Federal Aid System.

4. The signs must be erected within a reasonable time and not be stored or used for back-up.

Note: Street name signs or posts are not eligible for funding under this program.

Vandal Resistant Sign Fasteners

The purpose of this equipment is to provide for better permanency of roadway signing (Regulatory and Warning Signs).

Roadside Delineators

These reflectorized posts are especially useful safety devices on unlighted rural roads.

School Zone Safety Signs

This type of signage is available even to those communities which may have previously utilized their regulatory/warning sign option.

Other small scale road safety projects not specifically included in the aforementioned list may also be funded under this program, contingent upon the concurrence of the Federal Highway Administration, the source of these funds.

All acceptable applications are funded on a reimbursement basis only, and cities and towns are cautioned that any equipment purchased prior to receipt of written approval from the Governor's Highway Safety Bureau will be ineligible for funding assistance.

It should be noted that once a city or town has received funding assistance for one of the aforementioned projects, that community is ineligible for future consideration for that particular project. Communities are expected to keep records available to indicate usage of equipment purchased under this program.

If interested in receiving an application, please call Baystate Roads Program (413) 545-2604. Any questions you may have regarding this program should be directed to Dan Waters of the Governor's Highway Safety Bureau (617) 727-6956.

Reproduced from a Draft produced by: The Commonwealth of Massachusetts Executive Department, Governor's Highway Safety Bureau.

SEAT BELT MISCONCEPTIONS

Many people worry about their weight, cholesterol level, high blood pressure and even gum disease; no one wants to get fat, lose teeth, or have a heart attack. But don't forget that just driving to work or the store can be hazardous to your health. The following are a few myths which may be of interest.

❑ Myth: Occupants can brace themselves in a crash.

❑ Fact: The forces involved in even a low-speed crash make it impossible for anyone to avoid contact with the vehicle interior, which ultimately results in injury. At the moderate speed of 30 mph, an auto collision would throw occupants forward with weight. Also, one out of four serious in-vehicle injuries are caused by occupants being thrown against or crushed by each other.

❑ Myth: It is better to be thrown clear of the vehicle.

❑ Fact: A person is about 25 times more likely to be fatally injured if ejected from the vehicle than if inside and buckled up. Ejection can result not only in landing on unforgiving pavement, but also in hitting other lethal roadside objects, scraping along the ground or being crushed by one's own or another vehicle.

❑ Myth: Belts are needed only for long trips and high-speed expressway driving.

❑ Fact: Eight percent of serious and fatal injuries occur in cars traveling less than 40 mph. fatalities involving non-belted occupants have been recorded as low as 12 mph. Conversely, there were no fatalities to belted occupants in a 28,000 vehicle study with speeds up to 60 mph. Seventy-five percent of serious and fatal injuries occur fewer than 25 miles from home.

Source: Summer/Fall 1989 edition of Technotes, Utah Technology Transfer Center.

THE TOP TEN MOST COMMON DRIVING ERRORS

Human error accounts for a definite ninety-three percent of all traffic accidents. The National Safety Council has developed a pamphlet with the ten most common driving errors. Below is the list, in order of frequency:

❑ Improper lookout (pulling into a street from an intersecting street or driveway without looking carefully for oncoming traffic)

❑ Pulling out to pass without checking for traffic in the passing lane

❑ Pulling out of a parking space without looking back for oncoming cars

❑ Excessive speeding

❑ Inattention

❑ Improper evasive action (no attempt to steer around an impending crash, or an attempt to steer that was unsuccessful because brakes were slammed and the front wheels locked)

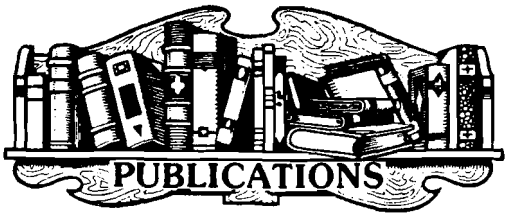
❑ Internal Distraction

❑ Inadequate defensive driving techniques

❑ Unjustified assumption (for example, when turning across two lanes of oncoming traffic, assuming there is no traffic coming in one lane when a driver makes way for you in the other, or assuming another driver will stop or yield even though he doesn't have a sign)

❑ Improper maneuvering (driving the wrong way on a one-way street or turning from the wrong lane) and over-compensation (accelerating or braking too fast or turning too quickly)

Source: Georgia T2 Center.



NEW LISTINGS

"Reducing Runaway Truck Accidents Through Weight-Based Advisory Speeds" (FHWA-IP-89-022) is a 36 page report which states that current guidelines may be leading designers to over-design highways, adding and maintaining unnecessary hill climbing lanes.

"Timber Bridges Design, Construction, Inspection and Maintenance" (United States Department of Agriculture, Forest Service) This volume may be borrowed. The book covers: timber as a bridge material, types of timber bridges, properties of wood and structural wood products, preservativation and protection of timber bridges, basic timber design concepts for bridges, loads and forces on timber bridges, design of beam superstructures (both glulam and sawn lumber systems), design of longitudinal deck superstructures, design of longitudinal stress laminated deck superstructures, rail systems for timber decks, wearing surfaces for timber decks, timber bridge fabrication and construction, bridge inspection for decay and other deterioration, maintenance and rehabilitation of timber bridges, bridge maintenance, rehabilitation and replacement, and case histories.

"Maintenance of Aggregate and Earth Roads" (FHWA-TS 90-035) This seventy page booklet discusses roadside ditch and surface activities, surface stabilization, equipment selection, concepts of maintenance and foundations of maintenance. A lot of good information is presented on equipment selection, utilization and placement, as well as a very interesting discussion of dust suppression.

"Operating Larger Tracks on Roads with Restrictive Geometry: Summary Report" (FHWA-IP-89-025), is a 14 page publication. Changes in the 1982 Surface Transportation Assistance Act allowed wider and longer tracks. Despite driver skill, trucks on urban roads encroached into other lanes on streets with width less than 12 feet. On rural roads, lanes wider than 12-13 feet allowed oncoming vehicles to move further right to avoid trucks. Another area of concern was at sharp curves (7-15 degrees) where opposing vehicles slowed down significantly and made other undesirable changes to pass large trucks.

"Improving Truck Safety at Interchanges" (FHWA-IP-89-024) This 36 page report deals with six specific design features and corrective countermeasures. They are: 1) poor transitions to superelevation, 2) abrupt changes in compound curves, 3) short deceleration lanes preceding tight radius exits, 4) curbs placed on the outside of ramp curves, 5) lowered friction levels on high speed ramps and 6) substantial downgrades leading to tight ramp/curves.

"Ramp Metering Status in North America" (DOT-T-90-01) This 20 page report provides an initial resource for those wishing to explore the feasibility of ramp metering in their area. This report presents a sample of ramp metering applications in several cities and describes reported benefits. It addresses factors which should be considered and capabilities and limitations of ramp metering implementation.

"Grade Severity Rating System (GSRS) Users Manual" (FHWA-IP-88-015) is a 13 page manual based on a mathematical model which uses gross truck weight and physical characteristics of the downgrade to predict the temperature of the truck's system brakes.

"National Transportation Strategic Planning Study" (U.S. Department of Transportation) is a massive volume, which may be borrowed for one month. The study, comprising 17 chapters and appendices, provides an overview of the Nation's transportation system, and identifies future investments required to maintain and develop our infrastructure. The first four chapters discuss the impact that demographic, economic, energy, and environmental changes have on the supply and demand for transportation services for the next 25-30 years. The next 5 chapters discuss the setting within which infrastructure issues are reviewed. An entire chapter is devoted to discussing prospects of finding technologic solutions to current and prospective transportation problems. The remaining chapters address various components of the transportation system from a model perspective.

"Highway Subdrain Design" (FHWA-Ts-80-224) is a 200 page document which may be borrowed for one month. It begins with a general discussion of the adverse efforts of subsurface water and its movements, and types of subsurface drainage installations. The book then covers data required for analysis and design, pavement drainage, control of groundwater, and construction and maintenance of subdrainage systems.

CALENDAR OF EVENTS

October 22, 23 & 24
"Work Zone Traffic Control"
Baystate Roads Program
Workshop
To be held at U Mass. Campus Center, Amherst; Nichols College, Southborough; and Holiday Inn, Dedham.
Contact: Mr. Silvio Baruzzi
(413) 545-2604

November 28
New England Chapter APWA
Annual Snow & Ice Conference
University of Connecticut
Contact: Mr. George Crombie,
Director of Public Works
(802) 863-9094 or:
University of Connecticut
Transportation Institute
(203) 486-5400

Massachusetts Highway Assoc.
Schedule of Meetings for 1990-91

November 8
Fall Meeting with Tri-County
Location to be announced.
January 17
Executive Committee
Marlborough, MA
February 7
Winter Meeting
Lantana's, Randolph, MA
March 7 - 8:00 a.m.
Executive Committee
Equipment Show/Clambake
Denny's, Stoneham, MA
April 4 - 4:00 p.m.
Executive Committee
Marlborough, MA
May 9
Spring Meeting
Wachusett Country Club

New England Water Pollution Control Association
1990 Meetings and Activities:

October 7-12
WPCF Annual Conference
Washington, DC
October 8 - Noon
NEWPCA Luncheon Meeting
Location TBA
November 8 - 9:30 a.m.
Executive Committee and
Committee Chairpersons
Westford Regency
Whittier Room
Westford, MA
December 13 - 9:30 a.m.
Executive Committee and
Select Committee Chairpersons
Pumpkin Room, Publick House
Sturbridge, MA
January 27-30, 1991
NEWPCA Annual Conference
Marriott Copley Place
Boston, MA
Contact: Mr. Alfred E. Peloquin
(617) 367-8554

August 17th, 1990 was a beautiful day -- it was also the day for the Berkshire County Highway Superintendents Association Equipment Show. In the picture below, Warren Anson and Peter Leidt are seen in front of a John Deere 624E bucket loader.

GENERAL INFORMATION

Please take a few minutes to check and respond to the questions below on the usefulness of the newsletter as well as other activities of the Baystate Roads Technology Transfer Center, in terms of its relation to your job. Your response is very much appreciated, and will help us to assist you more effectively in the future. **PLEASE TAKE THE TIME TO RESPOND.**

1. **Have you made use of or are aware of the following Baystate Roads activities?**

☆ Newsletter	Yes ____	No ____
☆ Publications	Yes ____	No ____
☆ Videotapes	Yes ____	No ____
☆ Workshops	Yes ____	No ____
☆ Information Service	Yes ____	No ____
☆ Road Shows	Yes ____	No ____

2. **How helpful were these activities to you or your agency?**

	Very Helpful	Somewhat Helpful	Of Little Help
☆ Newsletter	_____	_____	_____
☆ Publications	_____	_____	_____
☆ Videotapes	_____	_____	_____
☆ Workshops	_____	_____	_____
☆ Information Service	_____	_____	_____
☆ Road Shows	_____	_____	_____

3. **What information in the newsletter do you find to be the most useful?**

_____ Technical articles
_____ Workshop notices
_____ Calendar of Events
_____ Publications (available on request)
_____ Videotape / New Acquisitions (available for loan)
_____ Other items you would like to see

4. **Has any information or technique that you learned or obtained through any of the Baystate Road activities made your own, other employees', or your agency's operations more efficient, less costly, or safer?**

Yes ____ No ____

Please fold on line

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DEPARTMENT OF CIVIL ENGINEERING
UNIVERSITY OF MASSACHUSETTS
MARSTON HALL 214
AMHERST, MA 01002-9987

❖ ❖ ❖ ❖ ❖ ❖ ❖ ❖ ❖ ❖ MAILING LIST INFORMATION ❖ ❖ ❖ ❖ ❖ ❖ ❖ ❖ ❖ ❖

The Baystate Roads Program is in the process of updating our mailing list. Please take a few minutes to check and respond to the questions below. After completing the information, please detach this last page, fold it so that the business reply address on the reverse side of this page is visible, and mail it back to us. No postage is necessary. **PLEASE TAKE THE TIME TO RESPOND.**

☆ **Do you wish to remain on the Baystate Roads Program mailing list?**

Yes ___ No ___

☆ **If YES, is your mailing label correct? (Please check the mailing label below.)**

Yes ___ No ___

☆ **The mailing label should read as follows:**

Name: _____ Title: _____
Agency/Organization: _____
Address: _____
City: _____ State: _____ Zip: _____

☆ **Is there someone else who should be added to our mailing list who is not presently getting the mailings? If YES, please fill in the information below:**

Name: _____ Title: _____
Agency/Organization: _____
Address: _____
City: _____ State: _____ Zip: _____

The Baystate Roads Program, which publishes *Mass Interchange* each quarter, is a Technology Transfer (T2) Center created under the Federal Highway Administration's (FHWA) Rural Technical Assistance Program (RTAP). FHWA is joined by the Massachusetts Department of Public Works, the Department of Civil Engineering at the University of Massachusetts, Amherst, and local public works departments in an effort to share and apply the best in transportation technologies.

In addition to publishing *Mass Interchange*, the Baystate Roads Program facilitates information exchange by conducting workshops, providing reports and publications and videotapes on request, and offering one-to-one technical assistance on specific roadway issues. Because the program relies on input from many sources, inquiries, articles, and ideas are encouraged.

To contact Baystate Roads staff to receive future copies of this newsletter at no cost, or to submit ideas or articles to *Mass Interchange*, please call Silvio Baruzzi at (413) 545-2604.

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