

INTERCHANGE

VOLUME 2 NUMBER 2

SUMMER 1987

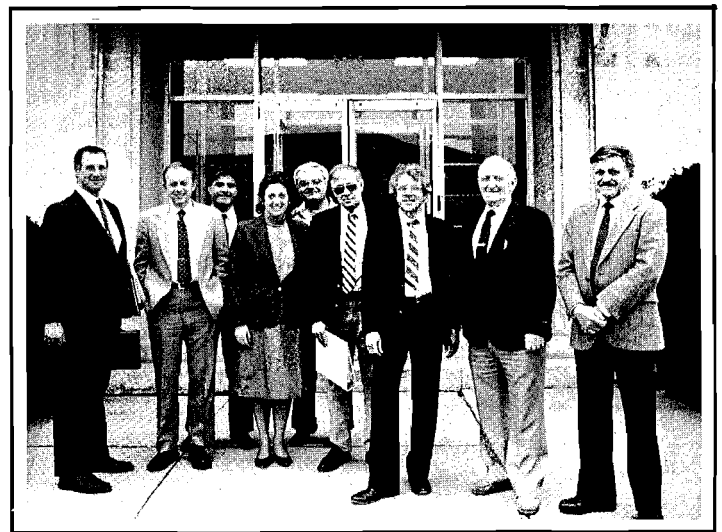
Baystate Roads Advisory Committee Established

The founding meeting of the Baystate Roads Advisory Committee was held on May 4 in Wellesley Hills. Composed of individuals from across the State, the Committee charge is to "...identify and suggest appropriate means and methods to improve the delivery of services specified in the tasks of the Baystate Roads Program contract." Among other things, the Committee is asked to provide feedback to the Program on workshop topics, newsletter content, and technical assistance efforts, and to identify local problems and needs they are aware of.

The individuals assigned these responsibilities have valuable and varied experiences to contribute. We are most fortunate to have Mr. Gerard L. Diagle, Bellingham Highway Department Superintendent (617-966-0203), as Chair. Just recently completing a productive year as President of the Massachusetts Highway Association, Mr. Diagle contributes his considerable leadership abilities and his extensive contacts. Worcester County is represented in Mr. Charles A. Reavey (617-464-2752), the Highway Superintendent from Princeton. Tri-County Highway Association President and Westhampton Highway Superintendent, Mr. Richard W. Tracy (413-527-0136), heralds the perspective of the smaller highway department. Mr. Gregory Dillard (413-527-8460), a Circuit Rider for Southhampton, Westhampton, and Chesterfield, views highway needs as one of many competing demands upon scarce local resources.

An active member of the New England Chapter of the American Public Works Association, Mr. Wallace W. Wyman (413-736-2679) provides a link with this well established organization, and offers his years of experience as a civil engineer. Mr. Edward G. Bates, Jr. (617-451-2770), the Transportation Group Manager for the Metropolitan Area Planning Council, provides the broad view of a regional planning organization. The five other original members of the Advisory Committee are the Baystate Roads Staff: Prof. Paul W. Shuldiner, Director; Prof. John Collura, Co-Director; and Ms Meryl Ann Mandell, Coordinator (413-545-2604); the Mass. Dept of Public Works representative, Mr. Matthew D. Turo (617-235-6100 ext. 149); and Mr. Richard Buser from the Federal Highway Administration (617-494-2316). Ms Mandell is the Committee Secretary.

One of the Committee's first suggestions was to increase its membership to include the President or his representative from each County Highway Association. Contacts with each County President have been established. Other comments included the possible involvement of MDPW State-Aid Engineers, asking Advisory Committee members to identify small towns that might benefit from a visit from Baystate Roads staff, and the possibility of developing a pool of retired engineers or public works officials to serve in an advisory capacity to nearby communities. Feel free to use the



(from the left) Richard Tracy, Richard Buser, John Collura, Meryl Mandell, Matthew Turo, Charles Reavey, Paul Shuldiner, Gerard Daigle, and Edward Bates meet regarding Program activities.

telephone numbers listed above to contact your representative on the Committee, call your County Association President, or call the Baystate Roads Program directly with comments or suggestions. The Committee offers another opportunity to make the Baystate Roads Program more responsive to your needs.

Rural Technical Assistance/Technology Transfer Center

Utility Pole Hazard Reduction Program

by Richard Buser

Federal Highway Administration

The Federal Highway Administration and The Massachusetts Department of Public Works are engaged in a cooperative effort which seeks to reduce fatalities and injuries resulting from vehicles striking utility poles. Unlike lightpoles and sign supports, which typically are designed to break away upon impact and provide a "forgiving" roadway environment, utility poles are rigid and unyielding, and are usually located close to the flow of traffic.

National and state accident data indicate that, second only to trees, utility poles are the fixed object most often struck when a vehicle leaves the road - and over one-half of the collisions with these poles result in an injury or fatality. Expanding upon the current practice of relocating poles during highway reconstruction, this

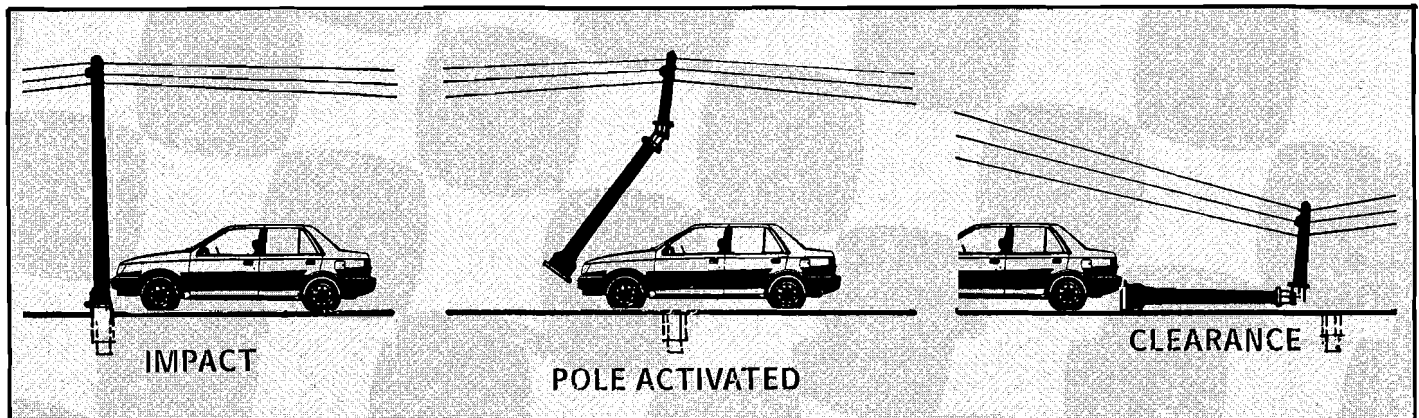
program carries out several relatively low cost yet effective measures to reduce accidents associated with existing utility installations.

These measures are targeted at specific locations throughout Massachusetts which are experiencing repeated vehicle-pole accidents and numerous fatalities and injuries. Such measures include pole removal or relocation where feasible; improving pole visibility by lighting, delineators, and signs or pavement markings; installing poles underground; and placing protective barriers or crash cushions around the pole.

As noted in the last issue of MASS INTERCHANGE, another alternative - currently under development in cooperation with local utility companies - is a wooden pole which would

safely break away upon impact. This "slipbase" utility pole would serve the interests of the highway user by reducing a roadside hazard, and also serve the interests of the utility industry by providing a pole that is salvagable, less costly to repair following impact, and which minimizes the interruption of electric and telephone service.

Following production, it is expected that this year a limited number of breakaway poles will be installed by participating utility firms at rural locations where crashes with poles frequently occur and where a danger to the roadway abuttor is not presented. The assistance of our readers, who may have knowledge of such locations, would be appreciated. For more information or to suggest locations, contact Mr. Richard Buser at (617) 494-2316.



Low Volume Roads Conference

The fourth International Conference on Low-Volume Roads will be held on August 16-20 on the campus of Cornell University in Ithaca, New York. Approximately 250 local highway officials are expected, with national and international representation. The conference is directly intended for local highway officials, and is held every four years. Tentative session topics include the following:

— Administration and Management

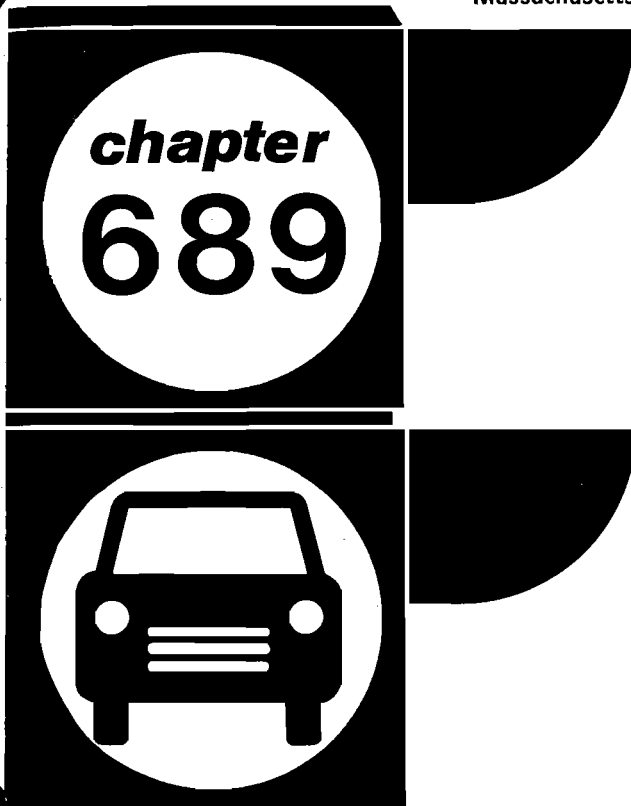
- Non-Standard Materials
- Heavy Hauling and Load Limits
- Asphalt Seals and Light-Duty Pavements
- Pavement Design and Management
- Geometric Design Considerations
- Geologic Hazards and Constraints
- Cement Concrete Rural Roads
- Low-Water Crossings
- Development of Standards and Specifications
- Roadway Management

- Vehicle and Traffic Operations and Costs
- Bridges
- Cold Recycling of Asphalt Pavements
- Maintenance Management

Registration, at \$100, should be made soon. For more information, contact Neil Hawks at (202) 334-2957, the Cornell Local Roads Program at (607) 255-8033, or write: Fourth International Conference on Low-Volume Roads, Transportation Research Board, 2101 Constitution Avenue, N.W., Washington, D.C. 20418.

NEW LAW IN MASSACHUSETTS GIVES COMMUNITIES GREATER FLEXIBILITY

by Robert L. Shea, P.E., Traffic Engineer
Massachusetts Department of Public Works



On January 7, 1987, Governor Dukakis signed into law Chapter 689 of the Acts of 1986. This law, which went into effect on April 7, 1987, gives Cities and Towns greater flexibility and responsibility in installing signs and signals on Town ways. As stated in the law, "any rule, regulation, order, ordinance or by-law of a City or Town...relative to or in connection with the erection or maintenance of signs, traffic control signals, traffic devices, school zones, parking meters or markings on any way within its control shall take effect without Department approval...." subject to certain conditions.

The major impact of this law is that Cities and Towns will no longer need Massachusetts Department of Public Works' approval or permits for traffic control devices, except in the following instances:

1. Any sign and signal involving any way at its intersection or junction with a **State Highway**;
2. Any sign and signal involving a project which is or was Federally-aided in whole or in part and where an Agreement has been or will be executed between the Commonwealth and the community;
3. Any sign excluding heavy commercial vehicles;
4. Any school zone in which the City or Town has received or intends to seek reimbursement from the Commonwealth;
5. Any one-way street sign which would prohibit the free flow of two-way traffic between adjoining communities on a through-way or main-way, as determined by the Department; or any one-way sign not placed at an intersection of said public ways (e.g., located at mid-block); and
6. Speed control signs, except where a non-State funded school zone is established.

In addition, Cities and Towns no longer need Department approval for signals and flashers on Non-State or Non-Federally-funded highways if the design, redesign, or change in timing and sequence are approved by a professional engineer employed by the community and registered in Massachusetts.

In all cases, City or Town action must conform to Department standards. It is important that Cities and Towns have a good record system which shows the engineering justification and conformance to design standards for each action. The standards are based on the current **Manual on Uniform Traffic Control Devices**, 1978 edition, and the sample regulation for a standard municipal traffic code (i.e., a City or Town's Traffic Rules & Orders, Traffic Regulation, Traffic Ordinances, etc.). The 1978 **Manual** was provided to each City and Town several years ago. Additional Manuals can be purchased from the Federal Government Bookstore, JFK Federal Bldg., Room G-25, Sudbury Street, Boston, MA 02203. The current price is \$44.00.

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BUDGET STRETCHERS

PROGRAM: Governor's Highway Safety Bureau Funding Assistance Program

DESCRIPTION: The Bureau administers Federal Aid dollars to cities and towns for assistance in undertaking safety projects and purchasing selected road safety equipment. Example equipment include: work zone protection equipment, pavement striping equipment, breakaway sign supports, vandal resistant sign fasteners, sign fabrication equipment, and loaner traffic counters.

ELIGIBILITY: Communities must identify a valid traffic safety problem, develop a plan to address the problem, and may not have received funding for that project during the past 15 years.

FUNDING: Money is now available for the 1987-1988 funding cycle.

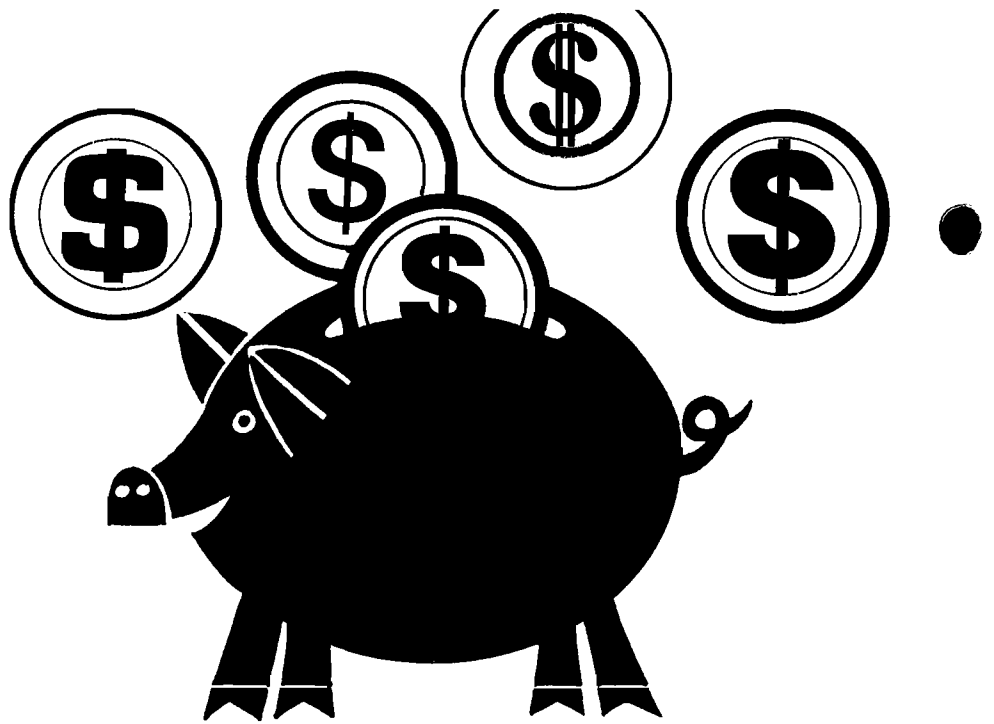
CONTACT: Mr. Dan Waters, Governor's Highway Safety Bureau, 100 Cambridge St., Room 2104, Boston, MA, 02202. Tel: 617-727-5074

PROGRAM: Incentive Aid Program

DESCRIPTION: This State sponsored program, administered by the Executive Office of Communities and Development, provides grant money to municipalities in the categories of professionalism; management training; service, operational, and management improvements; and mini grants. A broad range of projects are considered for funding, with emphasis on assisting management type efforts within towns and between towns.

ELIGIBILITY: Individual and groups of cities and towns can apply (as can school departments).

FUNDING: Funds are awarded twice a year, in July and November, up to \$30,000 per request. Applications should be submitted as soon as possible.



CONTACT: Ms Deborah Lindsay, EOOD Incentive Aid Program, 100 Cambridge St., Room 904, Boston, MA, 02202. Tel: 617-727-3253

PROGRAM: Federal Surplus Property Program

DESCRIPTION: The Massachusetts State Agency for Federal Surplus Property acquires and disposes of surplus Federal government property. Types of available property range from trucks to furniture to road graders and tractors. A particular item generally costs between 1% to 10% of the item's value. Periodic inquiries to the Program offices are encouraged due to stock turnover.

ELIGIBILITY: The Chief Executive Officer or a designee of a municipality should request then submit a completed Eligibility Packet from the Program offices.

FUNDING: This is an ongoing, self-supporting program which covers its operating costs out of pro-rated service charges. Some funds are available for property transfer expenses.

CONTACT: Mr. Edward F. Aleixo, Director, Executive Office for Administration and Finance, Purchasing Agent's Division - Room 1010, State Agency for Federal Surplus Property, One Ashburton Place, Boston, MA, 02108. Tel: 617-727-5774

PROGRAM: State Surplus Property Office

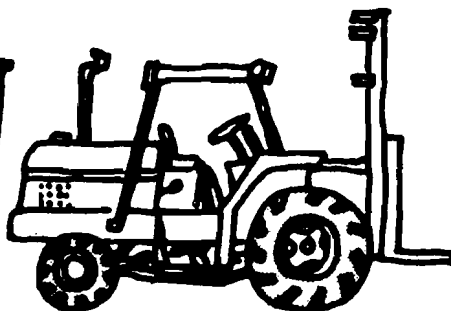
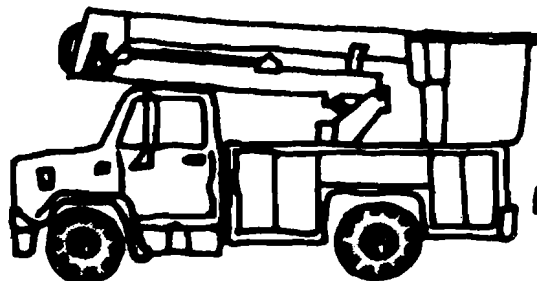
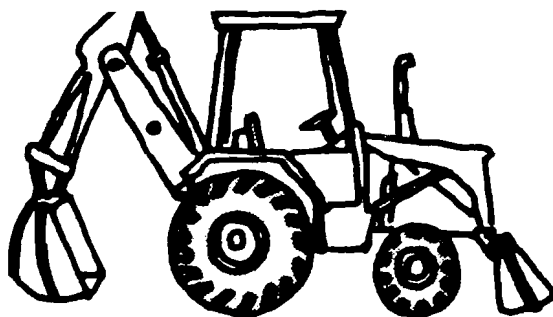
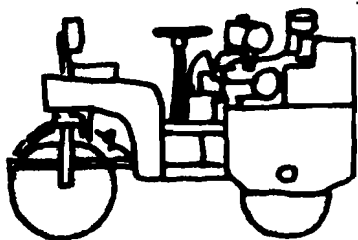
DESCRIPTION: In contrast to the Federal program, the State program must offer surplus State property to other State agencies first. Items not taken by another State agency are offered through sealed bid. This Office also runs a surplus vehicle auction. The vehicles are generally in poor condition. A municipality may register a request for a particular vehicle type with the Office. If such a vehicle becomes available, the town will be contacted, a visit to view the vehicle will be arranged, a price will be set, and the town can then purchase the vehicle before it goes to auction, if desired.

ELIGIBILITY: The auction is open to anyone. To get auction notification, send your name and address on letterhead requesting placement on the mailing list. Also include the types of equipment you might be interested in. Municipal requests for equipment or vehicles should be submitted directly to the Office.

FUNDING: This is an ongoing program paid out of State funds and sale proceeds.

CONTACT: Mr. Addis Williams, State Surplus Property Office - Room 1009, One Ashburton Place, Boston, MA. 02108. Tel: 617-727-5051

SWAP COLUMN



ONE PERSON'S TRASH IS ANOTHER PERSON'S TREASURE...

Take advantage of a golden opportunity to locate that piece of equipment you always wanted, but could not afford to buy new. Buy that equipment with the proceeds

you earned when you sold that item you thought no one would want. Use this column to list items for exchange between municipalities. If you have an item you want to sell, or you are in the market for something used, contact Meryl Ann Mandell, (413) 545-2604, to submit a listing.

* Looking for a tow behind broom in any condition: price open. Contact: Roger Bisbee, Williamsburg, (413) 268-7996.

* Want to sell or trade a 1969 Case backhoe. Contact: Michael Klimoski, Hadley, (413) 586-2390.

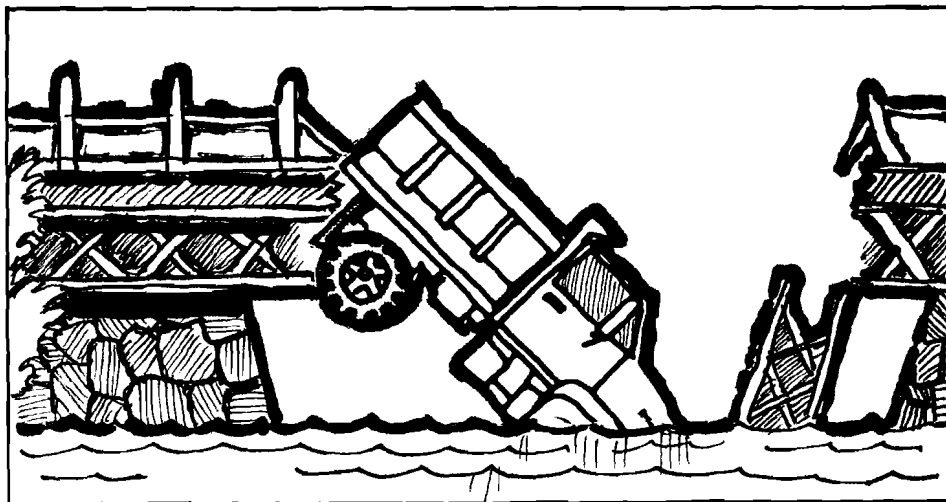
* Looking for a small tilt or dump trailer to carry 1 to 2 ton roller on. Contact: Richard Tracy, Westhampton, (413) 527-0136.

* Want to sell the following - 1. two used mowers - one is an 8HP Snapper rider, the other is a self-propelled 21" Toro with bagger 2. a 20 channel CB radio with two mobile units and one base station. All prices negotiable. Looking for a road sweeper, preferably gear driven tow behind. Contact: Robert Johnson, Alford, (413) 528-4536.

POSTING LOAD-RESTRICTED BRIDGES

Despite encouragement by both State and Federal highway administrations, many municipalities in Massachusetts have failed to post load-restricted bridges. The Massachusetts Department of Public Works not only inspects and rates every bridge in the State, but they also provide signs to each town declaring the safe load that a given bridge can support. More information about the condition of any local bridge can be obtained from Peter Kelley, MDPW, at 617-973-7740.

The reason many towns have failed to post these signs? **FEAR OF LIABILITY!** What these towns fail to understand is that posting is protection, both against lawsuits and the accidents that bring those suits

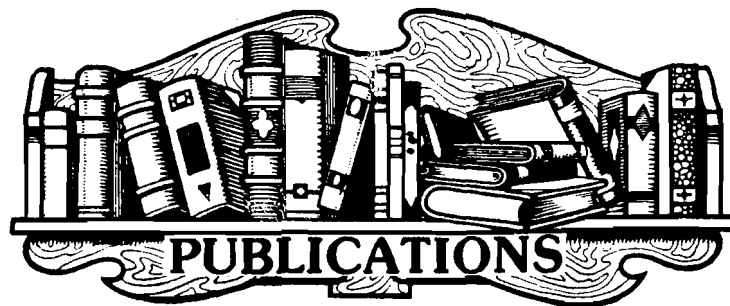


about. By not posting the weight limits of their bridges, many towns are actually opening themselves up to exactly the type of litigation they hope to avoid by leaving the signs in the garage. The probability of a lawsuit increases if there is an accident on a bridge that has been inspected, but not posted.

More importantly, the avoidance of accidents, not of court, should be the primary concern of local highway

departments. It is most fortunate that both the law and civic responsibility point in the same direction: posting of load-restricted bridges.

***** PLEASE RETURN THE BAYSTATE ROADS ACTIVITIES SURVEY THAT APPEARED IN THE LAST ISSUE OF MASS INTERCHANGE *****



This quarter, Publications highlights reports and articles distributed during the Baystate Roads Workshop Series - Aspects of Public Works Management. They can be obtained at no cost, while supplies last. Reports listed in previous issues of "Mass Interchange" are also still available. To obtain a copy, or to find out more about a specific report, indicate your choice(s) in a letter to the Program, or call Meryl Ann Mandell at (413)545-2604.

Executive Summary

- "Executive Summary: A Workshop Series on Aspects of Public Works Management," 17 pages.

Construction Contracts

- B-05-87 "Selecting a Consulting Engineer," 4 pages.

Personnel

- "How to Talk and Communicate at the Same Time," NACE Training Guide Series (31 pages - 1986).
- "Trainer's Guide," NACE Training Guide Series (19 pages - 1986).
- "Handbook on Training for Road Departments," NACE Training Guide Series (19 pages - 1986).

Purchasing

- "Governmental Leasing Techniques," Government Finance Research Center (5 pages - 1980).

- "Cooperation in the Provision of Services: A Study of Massachusetts and Rhode Island Towns," Cooperative Extension Service, University of Massachusetts/ Amherst, 10 pages.
- "Equipment Leasing - A Primer for Local Government Officials," Massachusetts Executive Office of Communities and Development (39 pages - 1983).
- "Standard Terms and Conditions for Contracting," Massachusetts Higher Education Consortium, 4 pages.

Gravel Roads/Roadways/ Potholes

- B-06-87 "Maintaining Gravel Road Surfaces," 4 pages.
- "When to Pave a Gravel Road," Vermont Local Roads Program, 8 pages.
- "Maintaining the Vermont Backroad," Vermont Local Roads Program, 8 pages.
- "Blading Aggregate Surfaces," NACE Training Guide Series (50 pages - 1986).
- "Making the Most of Your Motor Grader," Public Works Magazine (3 pages - 1981).
- "The Vermont Backroad - A Guide for the Protection, Conservation, and Enhancement of Its Scenic Quality," Northeast Environmental Design (69 pages - 1974).

- "The Vermont Backroad - Erosion Control Handbook," Ottauquechee Regional Planning and Development Commission (42 pages - 1979).
- "Pothole Primer: A Public Administrator's Guide to Understanding and Managing the Pothole Problem," U.S. Army Corps of Engineers (28 pages - 1985).
- "Pavement Maintenance Treatments," Robert Joubert - The Asphalt Institute, 6 pages.
- "The Minimum 4 Inch Pavement Thickness Design," Robert Joubert - The Asphalt Institute, 3 pages.
- "Construction Inspection Techniques for Flexible Pavements," Federal Highway Administration (61 pages - 1986).
- "Construction Inspection Techniques for Base Course Construction," Federal Highway Administration (84 pages - 1986).
- "Understanding Soil Compaction," J I Case Manufacturing, 18 pages.

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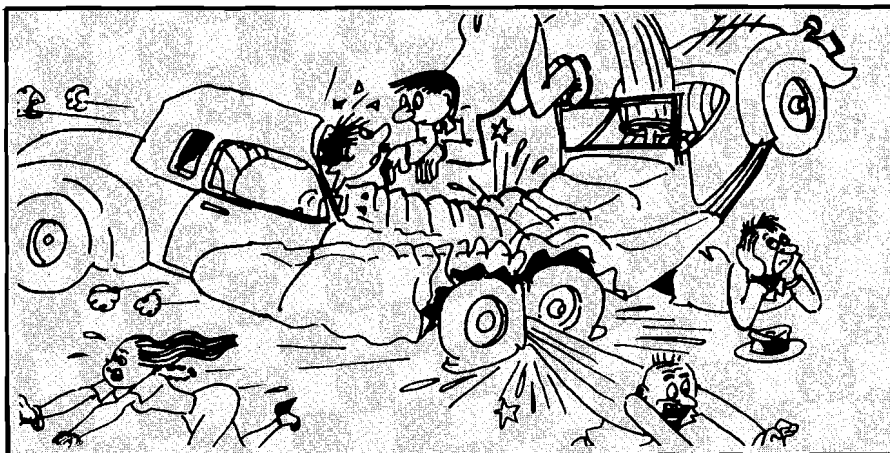
COLLECT CALLS
ACCEPTED

information

Use Accident Records

Accident records help you find problem areas. Some also contain humor. Below are actual statements found on insurance forms where drivers had tried to summarize the details of their accidents.

- * Coming home I drove into the wrong house and collided with a tree I don't have.
- * As I approached the intersection, a sign suddenly appeared in a place where a sign has never appeared before. I was unable to stop in time to avoid the accident.
- * I thought my window was down, but I found out it was up when I put my hand through.
- * I collided with a stationary truck coming the other way.
- * A truck backed through my windshield into my wife's face.
- * The guy was all over the road: I had to swerve a number of times before I hit him.
- * A pedestrian hit me and went under my car.
- * I was sure the old fellow would never make it to the other side of the road when I struck him.
- * I had been driving over 40 years when I fell asleep at the wheel and had an accident.



- * The indirect cause of the accident was a little guy with a big mouth.
- * The telephone pole was approaching. I was attempting to swerve out of its way when it struck my front end.
- * I pulled away from the side of the road, glanced at my mother-in-law and headed down the embankment.
- * The other car collided with mine without giving warning of its intentions.
- * I had been shopping for plants all day and was on my way home. As I reached an intersection, a hedge sprung up obscuring my vision, and I did not see the other car.
- * To avoid hitting the bumper of the car, I struck the pedestrian.
- * My car was legally parked as it backed into the other vehicle.
- * I told the police that I was not injured, but on removing my hat found that I had a fractured skull.
- * In my attempt to kill a fly, I drove into a telephone pole.
- * The pedestrian had no idea which direction to run, so I ran over him.
- * I saw a slow-moving, sad-faced, old gentleman as he bounced off the hood of my car.
- * I was thrown from my car as it left the road. I was later found in a ditch by some stray dogs.
- * I was on my way to the doctor with rear-end trouble when my universal joint gave way causing me to have an accident.

(From Wyoming TIP Newsletter)

CALENDAR

August 16-20

TRB Low Volume Roads Conference
Ithaca, New York

Contact: Neil F. Hawks
(202) 334-2957

August 16-20

ITE International Annual Meeting
New York, New York

Contact: John P. Thompson
Program Chairman, NEITE
(203) 865-2191

September 10

Annual Equipment Show & Clambake
Massachusetts Highway Association
Topsfield Fair Grounds
Contact: Harry Loftus
MHA Secretary
(617) 485-1973

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September 16

Timothy J. O'Leary Fund Dinner
Boston

Contact: S. Robert Pryzby
Secretary/Treasurer, NE Chapter APWA
(203) 659-2711 Ext. 344

September 19-24

APWA Congress & Equipment Show
Chicago, Ill.
Contact: S. Robert Pryzby

October 7-8

NEITE Meeting
Manchester/Bedford, N.H.
Contact: John P. Thompson

October 14

Annual Meeting - NE Chapter APWA
Contact: S. Robert Pryzby

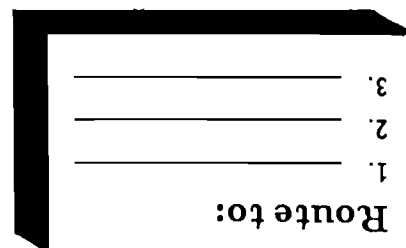
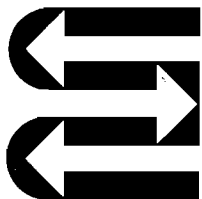
October 20 - Amherst

October 21 - Dedham

Workshop on Local Highway Safety
Baystate Roads Program
Contact: Meryl Ann Mandell
Program Coordinator, BRP
(413) 545-2604

October 21

Microcomputer Workshop
NE Chapter APWA
Contact: S. Robert Pryzby



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Baystate Roads Program
Dept. of Civil Engineering
University of Massachusetts
Marston Hall 214F
Amherst, MA 01003

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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 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*, call Meryl Ann Mandell at (413) 545-2604.