



Road Business

A University of New Hampshire Technology Transfer Center publication

Vol. 20 No. 3

Fall 2005



On the Road in New Hampshire

Working with Planning Boards

Developing a working relationship with the local Planning Board (PB) is valuable for both the highway departments and PBs.

In Lempster, Richard Fairweather was a member of the PB before he became Road Agent. He is the PB's agent for driveway permits. As part of the PB, he says that he "has the opportunity to provide practical input into the impacts of growth."

As a department head, Pete Lavoie, Director of Community Services in Dover, is a member of the PB. He reviews plans and sends his opinions to the board. Pete has worked for Dover for many years and has seen a lot of changes. His longevity with the city and his expertise contribute strongly to the PB's reliance on him.

Dave Lent of Merrimack says that two years ago there were weekly meetings to review sub-division and site plans. Public works, the conservation commission, deputy fire chief, the waste water inspector, and planning staff attended the meeting. They addressed issues of concern to PW and safety, such as turning and cul-de-sac radii,

both effecting emergency response and snow removal.

Currently, the developers and their engineers attend meetings to review conceptual plans for developments before making formal presentations to the PB. This allows all parties to assess the impact of a proposal. From the developer's point of view, the expectations of town are presented before time and money are spent on proposed projects.

In Goffstown, Town Engineer Meghan Theriault's responsibilities include working with the PB. Two weeks prior to a PB meeting there is a Technical Review Committee (TRC) meeting. The TRC reviews all plans on the agenda of next the PB meeting. Each member of the TRC submits written comments to the PB. Applicants generally use the TRC comments to address some issues before the next PB meeting. Meghan believes that it is important that she attends all PB meetings and that

continued on page 7

ALSO IN THIS ISSUE

Dave Fluharty Retires.....	2
Driveway Permits.....	3
Culvert Maintenance.....	4
High Visibility Clothing.....	5
Putting Customers First.....	6
Delegation.....	8
Publications.....	9
Videos.....	10
Milestones & Websites.....	11
Signs at T-Intersections.....	11
Calendar.....	12

Road Business is a quarterly publication of the

Technology Transfer Center
University of New Hampshire
33 College Road
Durham NH 03824
603-862-2826
800-423-0060 (NH)
Fax: 603-862-2364
t2.center@unh.edu
www.t2.unh.edu

UNH T² Center Staff

David H. Fluharty
LTAP Director
Charles H. Goodspeed
TRCG Director
Kathy DesRoches
Assistant Director and
Road Business Editor
Katy Claytor
Program Assistant



The Technology Transfer Center at the University of New Hampshire (UNH) is supported by the Federal Highway Administration (FHWA), the New Hampshire Department of Transportation (NHDOT), and UNH. Any opinions, findings, conclusions, or recommendations presented in this newsletter are those of the authors and do not necessarily reflect the views of the FHWA, NHDOT, or UNH.

Any product mentioned in *Road Business* is for information only and should not be considered a product endorsement.



Dave Fluharty, Director of UNH T² Center Retires

After serving almost 12 years as the director of the UNH Technology Transfer Center, David H. Fluharty retired on July 29, 2005. Dave joined the center in October 1993 and said that he enjoyed his time working with such an appreciative and knowledgeable clientele.



Dave grew up in Iowa and joined the Navy as an officer in the Civil Engineer Corps after college. Dave served for 20 years. After retiring he began his second educational journey at the University of New Hampshire. He earned his Ph.D. in sociology and began teaching at both UNH and the College for Lifelong Learning. Dave said that his occupational and educational experiences have helped him with his role at the center.

Dave's post-retirement plans include creating a Website to serve local road managers, spending more time with family, including his three daughters, eight grandchildren, and one great-grandchild; and moving to Five Islands Harbor in Georgetown, Maine with his wife Linda. Dave and Linda have been married 20 years and Dave said he's ready for the next chapter in their lives and, as always, it will be nothing short of an adventure.

Thank you, Dave, for your unprecedented hard work, leadership, and dedication. Farewell on life's continued journey and we'll miss you!

Charlie, Kathy & Katy



*Katy Claytor, Linda Hjortland, Dave Fluharty, and
Kathy DesRoches at Dave's Retirement Party.*

Driveway Permits



Driveways allow access to the public way. RSA 236:13 provides that municipalities may control the connection of private roads and driveways to local highways. Also, all private driveway

connections, including structures like culverts, remain the continuing responsibility of the landowner—even if located within the right of way. It is irrelevant if a driveway connection pre-dates the town's permit system. If any driveway connection threatens the integrity of the highway due to plugged culverts, erosion, siltation, etc. the planning board or its designee, can require the owner to repair it. If the owner refuses, then the town may perform the work and then assess the cost to the owner.

Driveway “permits are for the drivers' safety and the owner of the driveways safety. Every driveway is a point of possible conflict between vehicles. Permits allow the municipality the opportunity to work with the owner to eliminate potential drainage issues. They are a useful process for municipalities to control driveway access to the roads,” says Greg Placy, engineer in N.H. Department of Transportation's (NHDOT) District One. Placy advises reviewing sight distance when issuing driveway permits. Sight distance is the length of the roadway that a driver can see ahead (see page 8 of the Summer 2005 issue of *Road Business*).

To allow for sight distance issues, the NHDOT driveway policy states that there will no more than two driveways, entrances, exits, or approaches from any one highway to any parcel of land unless the frontage along the highway exceeds 500 feet.

Driveway construction may affect the structural integrity and safety of the road or street. This may result in increased maintenance costs or liability for municipalities. A driveway permit allows municipalities to:

- Provide for maximum safety for the public while minimizing conflict points,

- Monitor the design and construction of driveways,
- Enforce minimum distances between driveways, and
- Maintain highway right-of-way drainage.

Local Government Suggestions

Reasonable regulations ensure driveways are as safe as possible. Adequate staffing is necessary to process permits. To handle permitting questions, provide staff with consistent training.

For local agencies creating a new or revamping an old driveway permit, the following advice comes from the National Cooperative Highway Research Program Project 304 on Driveway Regulations. It states that policies should:

- Be consistent, fair, and flexible,
- Contain language that is easy to understand,
- Provide effective literature,
- Should not assume that the applicant understands the regulations and specifications, and
- Provide a thorough explanation of basis for decision when a permit is denied.
- Changes in use, i.e. residential to commercial or vice versa should require a new driveway permit with a review to determine if it meets current criteria.

Driveway permit enforcement is more effective when it is part of the development code rather than a street code. Land development codes provide for access review with each change of the site. With street codes, an established driveway tends to be forever. Therefore, it is not advisable to use the driveway permit to regulate development when development code is available.

Sources:

Gesford, Alan, *The Driveway Dilemma*, LTAP Technical Information Sheet, Pennsylvania Local Roads Program, #74, Summer 1998

[Hard Road to Travel](#), Local Government Center, 2004

[NCHRP 304 Driveway Regulation Practices](#), Transportation Research Board, Washington DC, 2002, 2002

[NHDOT Driveway Policy](#)

<http://www.nh.gov/dot/highwaymaintenance/pdf/DriveWayPolicy.pdf>

Culvert Inspection and Rehabilitation

Most municipalities in NH own hundreds, if not thousands, of culverts. As they age, culvert deterioration can become a serious financial problem for agencies. This article will discuss culvert inspection and repair as published in a recent Transportation Research Board study.

Inventories and Inspection

Creating and maintaining a culvert inventory allows agencies to know and track the condition of their culverts. An inventory saves time and money by enabling municipalities to schedule needed repairs and eliminating or reducing the number of failures.

A regular inspection schedule assists road managers to plan individual culvert inspections. Municipal inspection guidelines may vary depending on the size, type, and location of the culvert. Inspect major pipes at least every 3 years and more often where conditions are harsh, such as where there is brackish water, seawater, acidic runoff, or industrial discharge. Inspections should include channel rating (to indicate the amount of the scour), embankment erosion, siltation, etc. expected.

To create a successful inventory and management system, road managers may use these tips:

- Establish a standard set of guidelines to perform inspections,
- Train the inspectors to identify defects and severity, and to accurately complete the inspection reports,
- Collect data consistently, and
- Determine if a pipe needs repair, rehabilitation, or replacement during the inspection and report the findings.

One benefit of a culvert inspection and management system is to justify funds and prioritize work. An inventory reduces the likelihood that a pipe will deteriorate to a state where the roadway surface will dip or fail completely, resulting in the need to do costly unscheduled repair or rehabilitation immediately.



Repair and Rehabilitation

Repair culverts to keep them in uniformly good and safe condition. Repair activities include patching, crack sealing, invert paving, lining, or joint work. Correcting light deterioration detected by the inventory avoids more future serious problem.

Create specifications so contractors understand local requirements and expectations of culvert repair or rehabilitation work. Many agencies use construction specifications to address issues and requirements when a pipe is installed. However, when a pipe is lined, the requirements, issues, and processes are different.

Repair Strategies

According to the study, culvert lining is the most reported method of permanent structural stabilization. When managers have insufficient funds to perform major or deep excavations, the roadway is paved, or the traffic volume is high, they have used invert replacement, insertion of a pipe inside the deteriorating pipe, or installation a lining to avoid cut and cover.

The liner wall needs to be as thin as possible to maximize culvert flow capacity. Liners are forced through the culvert (pipe jacking) or pulled through. When repairing a segment or small portion of a culvert, install a section or two of liner by positioning the liner at the deteriorated area and jacking against the existing culvert.

Consider culvert replacement instead of rehabilitation when a pipe deteriorates to a point where:

- its structural integrity or soil support is lost;
- there are insurmountable problems, such as soil migrating through pipe joints;
- the roadway over the pipe is lost (excessive deflection);
- the elevation of the invert needs to be changed;
- or
- there is a lack of hydraulic capacity.

A culvert maintenance program saves the town money because repairs are managed and unscheduled costly emergency work is reduced.

Note: The NHDOT specification for culvert lining is 603.869 XX. Contact the UNH T² Center for a copy.

Source:

Assessment and Rehabilitation of Existing Culverts, A Synthesis of Highway Practice, Transportation Research Board, NCHRP Synthesis 303, 2002

High Visibility Clothing

High visibility clothing (ANSI 107 standard performance) refers to reflective and florescent vests, shirts, pants, hats, etc. that workers should wear to make them more visible when working near traffic and heavy equipment. The types of clothing one should wear depend upon the hazards they are likely to face.

- **Class 1 garment:** for workers that are separated from vehicular traffic of less than 25 mph. where background setting and worker tasks are not complex.
- **Class 2 garment:** necessary for greater visibility during inclement weather; where work background is more complex and close to moving traffic or vehicles; worker's attention will likely be diverted from traffic traveling 25-50 mph.
- **Class 3 garment:** where traffic speed is greater than 50 mph; workers must be conspicuous.

Source: Transportation Builder, Summer 2005, ARTBA, pg. 62

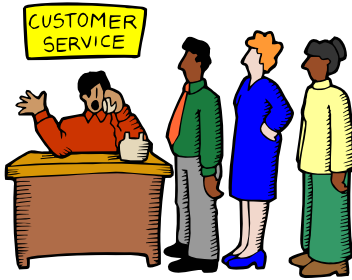
Options for Culvert Maintenance

Strategy	Objective	Work Option
Routine Maintenance	Keep a culvert in a uniform and safe condition by repairing specific defects as they occur	-Debris and sediment removal -Thawing frozen culverts
Rehabilitation	Takes advantage of the remaining usable culvert structure to recondition a culvert	-Joint sealing -Mortar repair -Invert paving -Scour prevention -Ditch cleaning & repair
Upgrade to Equal Replacement	Upgrade to provide service that is equal to that provided by a new structure	-Addition, repair, or replacement or appurtenant structures -Lining of the barrel -Provision of safety grates or safety barriers -Lengthening of culvert
Replacement	Provide a completely new culvert with a new service life	Can be accompanied by: -Realignment -Hydraulic structural and safety improvements -Change in culvert shape or material

This table illustrates work options for different strategies, such as routine maintenance, preventative maintenance, rehabilitation, and replacement. For each strategy the objectives are different and at least two work options are listed.

Putting Customers First

Standards for Serving the Public



Citizens expect safe, efficient, and satisfactory municipal services. To keep customers happy, deliver safe,

efficient, and satisfactory services and structure services in a way to make them convenient for the customer.

Education

Education and awareness are powerful tools that can promote departments and reduce communication errors with the public. Inform the public of the departmental mission, services, and how the public can contribute to improve or create additional services.

- Create kiosks of departmental information, such as services and contact information.
- Organize an open house and invite the public.
- Use newsletters to inform readers of current projects and future goals, as well as, plans to reach these goals. Make copies readily available.
- Use the web. Ensure the website is easy to navigate. Publish contacts, hours of service, road conditions, ordinances, and special events.

Customer Feedback

Seek customer feedback to improve services. A happy customer tells others about great service. Ask for feedback in multiple ways and tell customers of all methods to provide feedback.

- Have a “Suggestion Box” on-site.
- Welcome walk-ins during normal business hours.
- Post the comments, ideas, and suggestions; actions taken in response; and any results. Keep the posts anonymous. Posting comments demonstrate that the customer’s input is taken seriously. It also informs others of current

customer service issues and may prevent repeated complaints.

- Post positive feedback and success stories to boost employee morale and productivity. Employees will feel valued and appreciated.
- Use surveys to learn of desired services, what is and isn’t working, and what could work better. Learn why customers feel the way they do and how services can be improved or created to meet their needs.

Customer Complaints

Complaints are a way to know what customers want. The average person tells 5 people about the good service they receive and 20 people about bad service. Once corrected, complaints build loyalty as customers will see the department more favorably. Use these steps for customer complaints.

1. Thank the customer for the complaint.
2. Explain why the complaint is helpful.
3. Apologize for the mistake—this doesn’t mean accepting responsibility.
4. Promise to do something about the mistake immediately—this may mean contacting someone else.
5. Get all the necessary information.
6. Correct the mistake.
7. Check customer satisfaction.
8. Prevent future mistakes.

If a written complaint is received, respond in writing within a week and use clear and easy to understand language. Use a complaint track system to resolve problems.

When working with angry customers diffuse their anger by acknowledging their frustration, apologize, and explain any plans to alleviate the problem. Ask for their approval regarding the action to be taken. Once taken, contact the customer to ensure the situation was handled to their satisfaction.

Fall 2005 New Hampshire Directory of Roads Scholars

University of New Hampshire Technology Transfer Center

ROADS SCHOLAR I

This is the first Roads Scholar level. To achieve this level the scholar has participated in at least thirty contact hours, or six one-day workshops.

Marcelino Acebron Bow
Tony Albert NHDOT
Tim Anair Meredith
Mark Avery NHDOT
Charles Bailey Belmont
Robert Bain Plymouth
Ken Baldwin Chesterfield
Ken Barton Eastman
Community
Kent Barton Hopkinton
Ron Basha New Boston
Thomas Bayrd Hollis
Dave Bellamy Amherst
Robin Berry Mason
Thomas Bircher Hanover
Lenny Bolduc Hanover
Naomi Bolton Weare
Joe Boucher Dover
Brian Bourgoine Bow
John Boynton Lyman
Andy Brackett Meredith
Henry Brooks Keene
Bruce Brown Northfield
David Brown NHDOT
James Brown Salem
Nathan Brown Bradford
Scott Brown Amherst
William Bucklin Alexandria
Doug Bullen Durham
Robert Burbank Hooksett
Pete Bushnell Meredith
Ernest Butler Hillsborough
Bruce Caillouette Danville

Almus Chancey Bedford
Mark Chase Lyndeborough
Durwin Clark Surry
Hugh Clark Surry
Kevin Clement Lisbon
Sam Clough Haverhill
Gene Coburn Manchester
James Coffey Hillsborough
Bud Currier Bow
Janusz Czyzowski Londonderry
Scott Daley Merrimack
Jay Davini Manchester
Joe Dickinson Madison
Chuck Dill Durham
Ernie Doucette Merrimack
Thomas Dubey Thornton
Phyllis Duffy Exeter
Thomas Dutton Keene
Jesse Eames NHDOT
Timothy Elder Lebanon
Billy Eldridge Ossipee
Shaun Elliott NHDOT
Hazen Fisk New Ipswich
Dennis Ford NHDOT
Jess Forrence Hudson
Rod Forward Hanover
Donald Foss Pelham
Richard Frizzell Concord
Scott Frost Madison
Tyler Frost Goffstown
Peter Furmanick Holderness
Carl Gagnon Nashua
Dan Garlington Plaistow

Lawrence Gaskell Washington
Ray Gilpatric NHDOT
Lawrence Gilpatrick Bridgewater
Lary Glidden Newport
Doug Glover Sugar Hill
Roger Godwin Andover
Philip Gordon Pittsfield
Terry Gordon New Boston
Paul Goundrey Dartmouth
Hitchcock
Rob Greene Bradford
Dennis Grenon Bedford
Corey Hall Whitefield
Ken Hamilton Claremont
Robert Hatch Madison
Robert Havey NHDOT
Lenny Heath Merrimack
Robert Hebert NHDOT
Randall Heglin Jaffrey
Dale Hemeon Hooksett
Wayne Hewes Waterville
Norman Holden Freedom
Richard Hollins Boscawen
David Howard Lempster
Judy Huckins Northfield
Steven Jessemen Laconia
Jason Kimball Merrimack
Matthew Kimball Deerfield
Gary Kitson NHDOT
Joe Kopacz Alstead
John LaHaye Hanover
Bill Lancaster Hanover
Andrew Landry Nashua
Roger Landry Brentwood
Arthur Lane Portsmouth
John Larochelle Rochester
Richard Lefavour NHDOT
Shawn Littlefield Dartmouth
Hitchcock
Merrimack
Wayne Lombard Amherst
Ray Long Croydon
Donald Lussier Salisbury
William MacDuffie Walpole
James Maclean Newmarket
Richard Malasky Whitefield
Jason Marro Bedford
John Mathieu Bedford
David Maudsley Eidelweiss



Nancy Mayville	NHDOT	Clayton Philbrick	Francestown	Douglas Starr	Jaffrey
Kevin Mc Kinnon	Colebrook	Rick Plankey	Keene	Dennis Stevens	Sutton
Douglas Mellon	Hampton	Michael Plante	Chesterfield	Eric Stevens	NHDOT
Greg Messenger	Strafford	Scott Pollock	Nashua	Ken Stocker	Plainfield
Terry Miller	Claremont	Luke Powell	Laconia	Clark Stoddard	Alton
Zach Montoya	Hooksett	Calvin Prussman	Newbury	Robert Sullivan	Merrimack
Charles Morrill	Freedom	Ed Richards	NHDOT	Craig Sykes	Raymond
Mark Morrill	NHDOT	John Riendeau	New Boston	Michael Tarr	Nelson
David Morrison	Mason	Robert Ripley	Portsmouth	Bruce Thomas	Manchester
Gerald Morse	NHDOT	Emilio Risoni	Bedford	Joe Toupin	Bow
Paul Moynihan	Laconia	Wayne Robinson	Brentwood	Ed Tourville	Enfield
Todd Murray	Claremont	William Ruoff	Milford	William Tourville	Hanover
Dustin Muzzey	Gilford	Kenneth Salisbury	Amherst	Ed Trask	Merrimack
Tracy Nash	Walpole	Ralph Sanders	NHDOT	Roger Trempe	Dublin
Clarence Nason	Milton	Jeffrey Sarette	Goffstown	David Trudell	Dover
Todd C. Nason	NHDOT	Stanley Sawyer	Walpole	John Trythall	Merrimack
Keith Noyes	Exeter	Mary Shaw	Somersworth	Don Vachon	New Durham
Carl Oehler	Deerfield	Alan Sheldon	Dunbarton	Fred Wallace	NHDOT
Richard Page	Farmington	Kevin Sheppard	Manchester	Bart Wappes	Whitefield
Paul Paradis	Rye	John Silva	Gilford	Karen Welch	New London
Steve Parkinson	Portsmouth	Scott Simons	New Durham	Dennis White	NHDOT
Richard Patten	NHDOT	Patrick Smith	Milton	Larry Wiggins	Newport
Robert Payette	Raymond	Robert Smith	Walpole	Bruce Williams	Ossipee
Jay Perkins	Exeter	John Soulia	Hooksett	Thomas Willis	Rochester
Richard Perkins	Concord	Marc St. Pierre	Rochester	Troy Wilmott	Walpole

ROADS SCHOLAR II

This is the second Roads Scholar level. To achieve this level, the scholar has participated in a least 50 contact hours or 10 one-day work shops and has covered a set of subject areas, including Road Design and Construction Basics, Other Technical, Tort Liability or Safety, and Supervision or Personal Development.

Richard Abbott	Gilford	Robert Levesque	Durham
David Almon	NHDOT	Randall MacDonald	Hanover
Edwin Betz	Peterborough	Jim Major	Concord
Dan Bissonnette	Whitefield	Dennis Marquis	Nashua
David Cantor	Salem	Christopher McCormack	Plymouth
Reagan Clarke	NHDOT	Warren Miner	Concord
Clark Craig III	Greenfield	Jim Mountford	NHDOT
Douglas Deporter	NHDOT	Mike O'Neill	NHDOT
David Desfosses	Portsmouth	Carl Quiram	Goffstown
Dennis Desrochers	Hooksett	Thomas Richter	Portsmouth
Marguerite Dumont	Nashua	Birney Robbins	Keene
Donald Dunlap	Bow	Patrick Roberts	Bartlett
David Duquette	Charlestown	Steve Rougeau	Milford
Gordon Ellis	Epsom	Randall Smith	Sullivan
Joseph Fagnant	Plymouth	Timothy Smith	Lebanon
Kenneth Fanjoy	Portsmouth	George Sturgis	Exeter
Harold Fife	Northfield	Steve Swain	Northfield
Larry Gay	Merrimack	Allan Swiadas	Bedford
Chuck Grassie	Stratham	Mark Tapply	New Ipswich
David Herlihy	Amherst	Wayne Thompson	Bridgewater
David Kenneally	Chichester	Gerard Turco	NHDOT
Michael Kercewich	Alstead	Sumner Weeks	Northfield
Everette Kern	Portsmouth	Dave Wholley	Salem
Dan Lavoie	Nashua	Larry Young	Hooksett
Pete Lavoie	Dover		

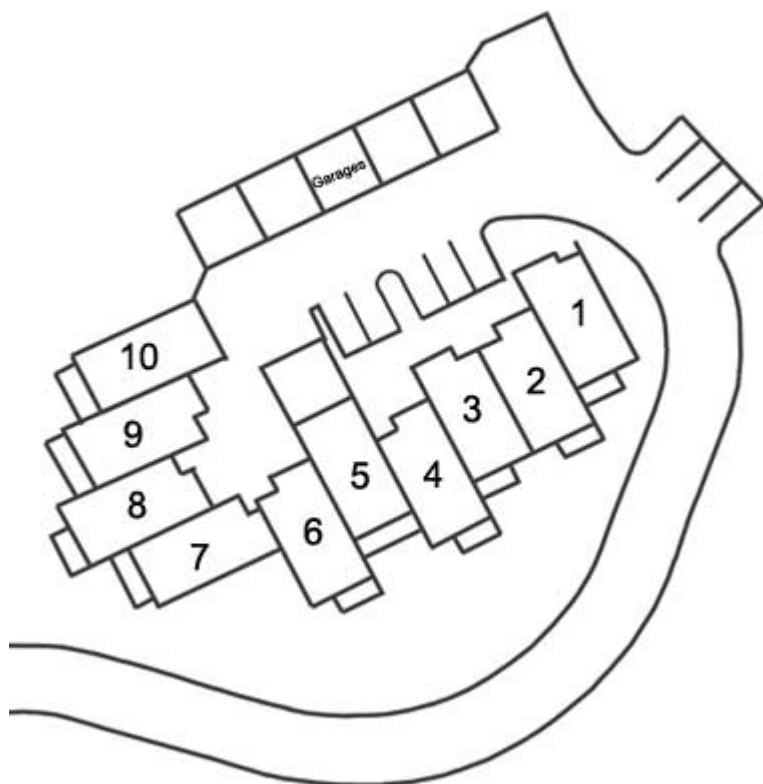
Improving customer service may seem to be an immense task but it is a valuable and worthy goal that gets easier with time. Employees will develop an improved capability to handle complaints.

Adopting tips from this article will improve customer relations. Customer service is not just for the customer, organizations that practice good customer service also reap the benefits.

The average person tells five people about the good service they receive and 20 people about bad service.

Sources:

Band, William, *Creating Value for Customers*.
Barlow, Janelle, Moller, Clause, *A Complaint is a Gift*. 1996
Broemmelsiek, John. *Customer Service Matters*. Wiley: 1991.
Miller, Adrien, *Customer Service Tips*, www.businessknowhow.com
Tschohl, John, *Achieving Excellence Through Customer Service*, 1996.
Zemke, Ron, Woods, John, *Best Practices in Customer Service*. HRD Press: 1999



continued from page 1

there is value to the TRC process because of departments are communicating.

A new process in Goffstown is driveway reviews. The National Fire Protection Association specifies rules for driveways. Previously, once a driveway permit was issued, no one checked to see how the driveway was laid out between the road to the house. There were times where the slope of the driveway was too steep for emergency vehicles. Now that doesn't occur.

Meghan believes that citizens are happier with the new permit processes in town. They know what to expect. The PB has helped Meghan as there have been times where a developer didn't do all that they promised. The PB stood behind their decisions, contacting the developer to ensure that all promises were kept.

Meghan suggests that towns would benefit from the technical review process where written comments are submitted to the PB. Towns with a smaller staff may want an outside party to review plans asking the developer to pay for the review.

Sources:

<http://www.nfpa.org/assets/files/PDF/ROP/299-02-rop.pdf>, September 2, 2005
http://www.pruverani.com/_subdivisions/sub36_site.asp?S=36, September 2, 2005

Special Thanks to: Ken Daniels, Enfield; Robert Eaton, NHDOT; Bob Emro, UNH; and Dave Lent, Merrimack for technically reviewing this issue of *Road Business*. Thanks to Richard Fairweather, Lempster; Dave Lent, Merrimack; Jamie McCullough, Dover; Greg Placy, NHDOT; and Meghan Theriault, Goffstown for their assistance with *Road Business* content.



An Effective Public Works Leader Delegates



Public works leaders are busy people and finding ways to effectively handle the mountain of work is a critical skill. When people try to do everything, they often become exhausted and ineffective managers. By engaging the team, managers can dramatically increase their effectiveness. Many try to do everything themselves, effectively hoarding work. They believe that if they can do the job well and do it right, why delegate?

A public works manager's job is to manage work. The town expects the department to get things done and the volume of work is generally too great for one person to do alone. Therefore, the ability to delegate effectively is an essential skill for the public works leader and manager.

Effective delegation requires a combination of several core competencies.

- Communications Skills,
- Responsibility, and
- Managing Resources.

Communication skills are essential to effective delegation. One must clearly articulate their desired outcomes. When the mission is misunderstood valuable time and effort are lost. Even though poor communication is the issue, this causes some to revert back to "I should have done it myself."

Responsibility. Delegation does not mean that work is passed on and never thought of again. It requires monitoring and reviewing work to ensure the task is progressing as directed. If the manager is

asked about the status of a delegated project or task they need to know the answer. "I gave it to Bob" is not an acceptable response. The delegator has a duty to touch base with "Bob" occasionally to know the status of the work.

Managers are responsible to ensure delegated work is done effectively and correctly. Check on the progress, identifying mid-course corrections that may be needed. It is necessary to track delegated tasks. Some managers may want to use tracking software, others a handwritten list.

Managing resources is akin to delegation and leadership. Effectively managing a team of people is critical to providing quality services to the community. Delegation empowers others and builds teams with every success. Delegation is an indication of trust as the manager sends the message that the employee is trusted to do a good job. Over time, this helps employees to build confidence and become more skilled members of the team.

Through delegation, public works leaders can maintain balance with home, work, and community responsibilities. Learning to delegate is challenging. The ability to "let go" and the wisdom to know when to do this are important skills that take practice and perseverance. It is a valuable tool to build the skills and confidence of staff.

Source;
Hann, Susan, APWA Reporter, January 2005, pg 32-33

NH Local Government Conference Sessions

These are a few of the public works sessions scheduled for the Local Government conference on November 17th.

- New Hampshire Public Works Association: *Zakim Bridge & Wetlands*
- New Hampshire Mutual Aid: *Transportation Security Awareness*

Publications

UNH Technology Transfer Center
Road Business, Fall 2005, Vol. 20, No. 3



The following publications are available free from the UNH T² Center. Consult www.t2.unh.edu/video_pub/publist.html for a complete list of publications. To request by mail: indicate selection, complete form, staple closed, affix stamp, and mail. The completed form may also be faxed, 603-862-2364, or emailed, t2.center@unh.edu. To request by telephone, 603-862-2826 or 800-423-0060 (N.H. only).

BMP's for Routine Roadway Maintenance

Activities in N.H. This manual provides information for personnel to select appropriate site specific BMP's. The BMP's are currently the most responsive control measures for protecting the environment. *NHDOT & NHDES.*

Controlled Low-Strength Materials (CLSM).

This report provides basic information on CLSM (flowable fill) technology, including application, material properties, mix proportioning construction, and quality control procedures. *American Concrete Institute.*

Covered Bridge Manual.

This manual provides technical and historic information on the preservation of covered bridges, including bridge components, engineering issues, and existing bridges. *USDOT & FHWA.*

NHDOT Highway Classification and Available Aid.

This resource provides information on the highway classification system and highway aid funds, including state aid, bridge aid, applications for estimates, highway block grants, and federal bridge aid replacement. *NHDOT.*

NHDOT Guidelines for Temporary

Erosion and Sediment Control and Stormwater Management. This document provides information on erosion control BMP's as a routine part of daily work. *NHDOT, NH Coastal Program, & NHDES.*

Tort Liability: NACE Action Guide.

This guide explains liability and insurance for individuals, public agencies, and employees, who are concerned with local road maintenance. *NACE, 1992.*

The Salt Storage Handbook.

This handbook has information on handling deicing salt, including storage, quantity of salt needed, ordering salt, site selection, and a storage area checklist. *The Salt Institute.*

The Snowfighter's Handbook.

This handbook has information on snow and ice control, including training, equipment, planning, types of snow, calibration, salt application, spreading and plowing problems, and safety. *Salt Institute.*

Material Request

Name: _____

Title: _____

Affiliation: _____

Mailing address: _____

Town/City: _____

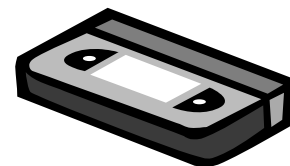
State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

Vi deos

UNH Technology Transfer Center
Road Business, Fall 2005, Vol. 20, No. 3



The following videos are available for a two-week loan. Consult www.t2.unh.edu/video_pub/vidinfo.html for a complete list. Five videos may be borrowed at one time at no charge. To request by mail, indicate selection, fill out the form on the reverse side, staple closed, affix stamp, and mail. The completed form may also be faxed, 603-862-2364, or emailed, t2.center@unh.edu. To request by telephone, 603-862-2826 or 800-423-0060 (in N.H. only).

____ **Cleaning and Clearing of Bridges, M-223,**

13 min. Discusses the eight easy steps to clean and clear bridges, including tools that are involved and what repairs are anticipated. *FHWA.*

____ **Frost Action in Soils, M-273,** 13 min.

Describes formation of frost heaves, their effects, and frost action testing. *CRREL.*

____ **How CaCl₂ is Made and Used, M-263,** 20

min. A two part video that explains usages for CaCl₂, how it is made, the stabilization process, and provides research results of CaCl₂ studies. *General Chemical.*

____ **New Hampshire Public Works Mutual Aid Program, PA-236,** 10 min.

This informational video explains the benefits of joining the Mutual Aid program.

____ **Snow Plow and Spreader Operation, M-242,**

50 min. This three part video discusses the equipment needed for using a snow

plow/spreader, daily inspections and equipment servicing, and demonstrates plowing and spreading techniques. *NE DOT.*

____ **Using Snow Plows on Motorgraders, M-297,**

16 min. Describes plow types and conditions for their use, how to connect each type, and how to plow using the proper plow type. *FHWA.*

____ **White Gold, M-248,** 26 min.

Emphasizes the proper selection of snow equipment and discusses the advantages and limitations of various types of equipment, plows, and blades. *New England Chapter APWA.*

____ **Winter Operations Training Program: Pre-Season Preparation, M-302,** 30 min.

Discusses the usage of snow-removal equipment, including reversible plow, light and heavy duty wing, and provides guidelines on conducting a pre-season maintenance check.

Place
Stamp
Here

University of New Hampshire
Technology Transfer Center
33 College Road
Kingsbury Hall
Durham NH 03824

Mi l estones:

Ed Betz, public works director in Peterborough retired.

Dave Fluharty, director of UNH T² Center, retired in July 2005.

Bill Fralick, NHDOT District 6 retired.

Stephen McKinley, NHDOT District 2 passed away August 24, 2005.

Websi tes:

N.H. Department of Safety Lab 1400:
<http://www.gencourt.state.nh.us/rules/lab1400.html>

N.H. Department of State Planning:
<http://nh.gov/oep/programs/MRPA/index.htm>

NHDES Fact Sheets:
<http://www.des.state.nh.us/openme.htm>

NHDOT Standard Road and Bridge Plans:
<http://webster.state.nh.us/dot/standardplans/standardplans.htm>

N.H. Pesticide licensing (Department of Agriculture):
http://agriculture.nh.gov/topics/pesticide_licensing.htm

N.H. Revised Statues: <http://www.gencourt.state.nh.us/rsa/html/indexes/default.html>

Pedestrian Safety Guide and Countermeasure Selection System: <http://www.walkinginfo.org/pedsafe/>

Li stservs

A listserv is a free way to use email to exchange information. To subscribe send an email to ListProc@lists.unh.edu. Leave the subject line blank, in the body of your message type:

Subscribe listname your name

For instance:

Subscribe pw.net John Doe

PW.NET

Want to know what is happening in other towns? Or, learn the very latest in regulations? Need a place to ask questions of other public works officials? Want to be the first to receive notifications of UNH T² Center workshops? Sign up for pw.net

RunOff.Talk

Want to discuss NPDES II issues and concerns? This list enables a dialog to clarify federal permits, and determine the best technical management for compliance. Use it to announce meetings and conferences.

Si gn for T-I ntersecti ons

MUTCD Section 2C.38 Two- Direction Large Arrow Sign (W1- 7)

T-intersections are often improperly signed. The Manual of Uniform Traffic Control Devices (MUTCD) specifies the W1-7 Sign (at right) for the T-intersection. It says:







- The Two-Direction Large Arrow (W1-7) sign *shall* be a horizontal rectangle.
- If used, it *shall* be installed on the far side of a T-intersection in line with, and at approximately a right angle to, approaching traffic.
- The Two-Direction Large Arrow sign *shall not* be used where there is no change in the direction of travel, such as at the beginning and end of medians or at center piers.
- The Two-Direction Large Arrow sign *should* be visible for a sufficient distance to provide the road user with adequate time to react to the intersection configuration.



Road Business

Technology Transfer Center
 University of New Hampshire
 33 College Road
 Durham NH 03824-3591
 603-862-2826 or
 800-423-0060 (NH)
 Fax: 603-862-2364
 t2.center@unh.edu
 http://www.t2.unh.edu



Monday	Tuesday	Wednesday	Thursday	Friday
 <h2>OCTOBER</h2>				
3 	4	5—APWA Snow and Ice Conference	6	7—Public Speaking, Manchester
10	11—Winter Operations, Rochester	12	13—Winter Operations, Swanzey	14
17	18—Culvert Installation, Rochester	19	20—Culvert Installation, Swanzey	21
24—Basics of a Good Road, Somersworth	25—Municipal Permits, Lebanon	26	27	28 
31—Basics of a Good Road, Lebanon				
<h2>NOVEMBER</h2>				
	1	2	3—Erosion Control, Swanzey	4
7	8	9—Tort Liability, Manchester	10	11—Veteran's Day!
14	15	16—LGC Annual Meeting*	17—LGC Annual Meeting*	18 
21	22	23	24—Thanksgiving!	25
28	29	30—NHI Road Safety Audits, Manchester		
 <h2>DECEMBER</h2>				
			1— NHI Road Safety Audits, Manchester	2
5 	6—A Hard Road to Travel, Lebanon	7	8—A Hard Road to Travel, Rochester	9

*Topics include: Zakim Bridge, Wetlands, and Transportation Security Awareness