As a municipal street and highway official, you take risks everyday. Any action or failure to take action by your department can lead to injury to employees or the public, property damage, and damage to your town’s public image.

Larger municipalities usually have greater and more diversified loss exposures; however, they also have at hand a wider range of resources for managing their exposures to loss.

Small municipalities must deal with many of the same loss exposures, but without the range of resources available to other towns.

Regardlls of size, all municipalities face many types of hazards and cannot afford to let these risks go unmanaged. Risk management helps you to effectively identify and evaluate loss exposures so they can be eliminated or reduced. Risk management should be a critical component and organizational priority for all municipal operations.

An effective risk management program does not require you to implement complex theories or complicated programs. It does not require you to spend significant dollars or make major capital improvements. It does require you to think about, identify and evaluate the types of losses that you can prevent and control.

Chances are you already have some risk management techniques in place. For example, if you performed hazard assessments and required specific personal protective equipment (PPE) for field employees, you are practicing risk management. If you require pre-trip inspections on vehicles, you are practicing risk management. If you implement a sidewalk preventative maintenance and inspection program, you are practicing risk management.
goals of risk management is to train all employees to think like risk managers. This requires effective communication across the entire municipal organization. Supervisors and managers must practice good risk management, and coach their employees to do the same. Consideration of risk management in all processes and procedures in daily operations will reap substantial benefits.

Training Techniques

Training in risk management, or more specifically in employee safety, can be accomplished in many different ways. Street and highway officials should evaluate the following training techniques and determine which ones will work best for their employees.

- **On-the-job training and one-on-one discussions** with employees are usually the most effective and time efficient when combined with on-the-job skills training.
- **Safety meetings** can be very valuable in cases requiring group cooperation. For example, you should review workzone safety precautions prior to conducting street and roadwork.
- **Scenario and case history reviews** are often used in team situations. This technique requires substantial preparation on the part of the instructor and careful consideration of the audience.
- **Storytelling** is an oral tradition that often exists in dangerous workplaces. Experienced workers pass down lessons-learned to new and lesser-experienced workers. In today’s safety culture, stories raise awareness about real dangers by painting powerful mental images, and improve the way employees perform their jobs.
- **Lectures** are the cheapest, most commonly used, and least effective method of training. Involving employees in discussions or question and answer sessions make lectures more effective.
- **Printed material and audiovisuals** are effective when live demonstrations are too costly or unavailable. Computer-based training and learning can also be an effective tool; however these training techniques are best suited as supplemental training tools for an instructor. Used alone, they are suitable only for refresher training.

Attitudes

You may have difficulty convincing your staff to take safety training or safety measures seriously. The problem may lie in management’s attitude, the employee’s attitude, or the communication and relationship between the employee and his management.
Inappropriate or ineffective safety training may fail to change employee behavior. Employees forced to attend lectures on safety topics that are not related to their jobs or that are poorly presented, too often leave the session feeling that the training was trivial. Managers and supervisors should solicit employee feedback concerning the safety training they receive.

Seek Feedback
Because there are so many other factors that influence an employee's decision to work safely or not (e.g. fatigue, peer pressure, equipment failure), determining the efficacy of safety training is not easy. However, managers and supervisors need to work with employees in a cooperative effort to improve future programs. After your training program, seek feedback from your employees as to which topics they want or need more training on. Encourage your staff to get involved and offer constructive feedback. You can do this in several ways—

- **Talk with people** before, during, and after a training session. Listen to what people have to say; you may hear about something that should be changed or added to improve the program.
- **Don't be afraid to ask**, "How am I doing?" You might be surprised by the feedback.
- **Keep learning logs.** Use a small pad or day-planner to note training ideas from things you see in the field or hear from other coworkers. Borrow new ideas from other municipalities.
- **Test retention.** Several weeks after training, observe your employees in the field, talk with them to determine if the training helped them to change their behavior or to view their job risks differently.

### The Benefits

Effective safety training and management’s commitment to support the goals and objectives of risk management will deliver positive benefits for you and your municipality. You can—

- **Protect the public and your employees** from the risk of accidents and injury.
- **Make more effective use of public funds.** Instead of paying claims, defense costs, and higher insurance rates, you can direct the saved dollars toward programs beneficial to employees and the public.
- **Decrease overall costs and increase productivity.** Preventing work related accidents and injuries will reduce Workers' Compensation costs, overtime expense, costs related to lost work days, and decreased morale.
- **Identify and evaluate exposure to loss** you may be able to avoid or manage with contracts or additional insurance.
- **Reduce the overall “cost of risk”** so your municipality can reduce risk-related budget items and free up money for other services.
- **Reduce uncertainties** associated with future projects. Governing boards may not consider proposed services to be feasible until they know that the right risk management controls are in place.
- **Provide your town with a better risk profile** and loss experience that may lead to greater availability of insurance and lower cost of insurance.

While safety training and practicing good risk management are not foolproof answers to protect your town from the risk of loss, making risk management an organizational priority in daily operations and providing your employees with the effective safety training can make your operations safer, more efficient, and less costly.

### Memorize Those Lost in Work Zones

The National Work Zone Memorial is a living tribute to the memory of those who have lost their lives in roadway work zones, and includes the names of work zone workers, law enforcement personnel, public safety officials, motorists, pedestrians, and children who have perished. The memorial travels to communities cross-country year-round to raise public awareness of the need to respect and stay safe in America’s work zones.

Terri Thompson, ConnDOT’s Work Zone Safety Chairperson, wants to make sure that the national memorial, as well as Connecticut’s memorial, include not only the names of DOT workers who have fallen in the line of duty, but also represent all other people in the industry. She is seeking help from Connecticut public works agencies, enforcement agencies, contractors, utility companies, and inspection firms to consider including names for the memorial.

Please contact Ms. Thompson, Supervising Engineer in ConnDOT’s Office of Construction, by phone at 860-594-2667 or by e-mail at terri.thompson@po.state.ct.us, if you have a submission so that she can update Connecticut’s memorial roster. Additional information and a submission form are available through ATSSA’s National Work Zone Memorial web site at http://www.atssa.com/about/foundationnwzm.asp.
Training: What’s In It for Me?
by Michelle Polston
Kansas Local Technical Assistance Program

In today’s job market, the difference between two people competing for a job often comes down to which person has more experience and training. Yet some employees avoid training at all costs. Training is not a waste of time and money; it’s a smart investment in oneself. Here are some of its benefits:

Knowledge
Knowing everything about your job is nearly impossible. Knowledge is power and it will assist you in obtaining (and keeping) a job.

Advice
Many obstacles occur while designing, constructing, repairing, and transporting. Asking questions from others with a different point of view can solve a tough problem or simply provide insight for a new solution. Problems cannot be solved without asking questions.

Seeing Is Believing
Learning how to operate equipment and machinery can save money and time. This is an efficient method for your agency’s funds and for your sense of accomplishment.

Friends and Contacts
At training and workshops, strangers become friends and acquaintances. Also, talking with others from a similar area helps to generate new ideas.

Looks Good on Your Resume
For one reason or another, the day may come when you will leave the agency you are currently with. If that happens, as mentioned above, training is a great asset to add to your resume and can sometimes be the deciding factor in who gets the job.

Confidence
Being able to answer a question and explain things to others builds your confidence level, both professionally and emotionally.

Safety
A well-trained staff saves time, money, and concern. It makes a huge difference when everyone on the staff knows exactly how to do their jobs safely.

If you are still hesitant about attending a certain workshop or training event, ask yourself: What needs do I have and how can this workshop meet those needs? If you can answer that question and are being encouraged to attend by your supervisor, consider the reasons mentioned above and attend the workshop with an open mind and a good attitude. For all you know, the workshop could lead to better wages, a better work environment, or even open doors to a promotion or new jobs down the road.

Education regarding your job is never a waste of time. Even if you learn things in a workshop that don't directly affect you, the information can always be passed on to another who could significantly benefit from your experience.

Sources:

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Where to Find a Mentor, How to Be a Mentor
by David Grouchy
Grouchy Enterprises

The outlook for the future is dire. Every city, county and state is being asked to do more with less. The transportation systems cannot handle the volume or the load of the traffic. Salaries of public works employees are much lower than the national average. The driving public is frustrated and openly hostile. Morale is at an all time low. Many good people are leaving the public sector and taking their experience and enthusiasm with them.

What is a supervisor to do? Obviously, the answer is complicated and different for every city, county and state government. There are some basic remedies that can help in all cases, though. One of these is to find a mentor, someone who has the knowledge and experience to help you handle the problems you now face.

Most mentoring is of an informal nature, involving a new supervisor and a more experienced supervisor or administrator. The relationship can develop a number of ways, including outside interests, work interaction and one party seeking out the other. Obviously, while this method may be very effective in specific cases, it is unreliable as a policy.

Some agencies have structured mentoring as part of their workforce development program. This may be known as formal mentoring or planned mentoring. It primarily focuses on the goals of the organization. Organizational goals increase productivity, eliminate turnover and reduce absenteeism. Planned mentoring concentrates on the needs of the organization. This usually results in benefits to both the organization and the new supervisor. This type of mentoring promotes a formal approach to the relationship so there is little or no social interaction. The mentor and new supervisor rarely see each other outside the office. The mentor and new supervisor are not concerned with developing a friendship as much as they are interested in meeting the organization's needs. After all, the basis for the relationship is organizational commitment. This type of mentoring takes a systematic approach that usually involves matching participants based on career paths. The organization trains the participants to understand their roles as mentor and new supervisor. At some point progress is evaluated to determine the results, such as advantages, cost effectiveness, and difficulties.

If none of these options are available to the new supervisor, self-mentoring may be the only option.

Self-mentoring can be considered a type of mentoring, it differs significantly from the other two mentoring types because it is more a strategy than a program. There is no mentor who promotes the development of a new supervisor. Rather, the individual cultivates his or her own professional growth through self-tutoring activities and resource-finding techniques. Self-mentoring requires the individual to be highly motivated and self-disciplined. The individual prefers to increase job effectiveness and augment professional talents by building a body of knowledge and skills without the aid of other people. There are several self-mentoring strategies that successful individuals have used.

Here are five strategies that individuals have used to help advance their professional growth:

1. Ask questions and listen carefully to the experts in your field of interest. This includes finding out who is the authority on a subject and asking detailed questions. Talk to people who are in positions to which you aspire.

2. Read and research materials in the field. Learn new information from trade magazines, books, and periodicals.

3. Observe people in leadership positions. Individuals can learn a lot about the inner workings of the city or county and different leadership styles simply by watching those in authority.

4. Attend educational programs. Educational programs may include conferences, seminars, night classes or city or state training courses.

5. Seek out new opportunities. Volunteer for projects or join professional organizations. You may want to alert your new supervisor to these strategies. A new supervisor should be encouraged to look for opportunities to develop independently, outside of the traditional mentoring arena.
Despite the logical assumption that removal of bicycles and pedestrians from proximity to motorized traffic should improve their safety, recent research shows otherwise. Most of us assume, incorrectly, that the safety issues on shared-use paths are minor and certainly far less serious than the safety issues on roads. Particularly since the implementation of ISTEA and TEA21, states and municipalities have been building dedicated non-motorized facilities, such as shared-use paths, at an unprecedented rate. And for the most part, the public loves these facilities, venturing out to walk, jog, bicycle and rollerblade at a rate that makes path capacity an issue in some locations. Unfortunately, the transportation safety issues on these off-road facilities are not fully understood.

In previous research (1998 and 1999), CTI’s Dr. Aultman-Hall found that sidewalks and off-road shared-use paths have incident and injury rates significantly higher than those for on-road cycling. Similar results have been found by other researchers in Washington state and California. Given the preference of many people for cycling on paths including rail trails, and out of concern for the safety of the walkers, joggers and runners, it is timely to study what is dangerous about shared-use paths, and how they can be operated more safely for all users.

Planners and researchers have very little data upon which to conduct defensible safety analysis to identify causal factors, design counter-measures and/or to make design decisions for non-motorized facilities. This is particularly true for shared-use paths. While various designs and operational characteristics exist, such as the 1999 AASHTO Guidebook for the Design of Bicycle Facilities, no comprehensive study of their relative effectiveness has been undertaken. Furthermore, traditional crash and injury databases are not complete with respect to incidents that occur on paths. There are two key limitations that hinder non-motorized safety analysis, particularly for shared-use paths: lack of complete incident databases and lack of travel exposure information.

In order to further our understanding of shared-use path safety, the Connecticut Department of Transportation funded a study at the University of Connecticut in 2002 and 2003 to design a survey instrument to collect comprehensive self-reported path crashes and injury events for all path users. The survey was piloted in September 2002 on the Farmington River Trail in the Town of Canton, Connecticut. Between June and July 2003 the survey was conducted on a second section of the Farmington River Trail in the town of Farmington and the Farmington Heritage Canal Greenway in Cheshire.

In total, 684 shared-use path users were surveyed on the three shared-use path facilities in Connecticut. These users reported 51 collision or fall events (37 on the specific sections of shared-use paths being studied). Of those 51 events, 35 resulted in injuries; two of which were considered major. The amount of travel for each group of users on each trail was estimated from survey questions and a map where participants traced their most common route. This allowed researchers to calculate the average crash and fall rate per unit distance traveled for each user group and for each path facility.

The results showed that event rates for skaters were highest, followed by bicyclists and pedestrians. The bicycle event rate was three times that of pedestrians, while the rate for skaters was over six times that of pedestrians. Falls were the more frequently reported events when compared to
collisions and they were more often associated with an injury. Therefore, efforts to understand what can prevent falls are necessary.

The overall incident rates were highest on the trail with the largest traffic volume and largest number of intersections and lowest on the trail with the fewest intersections and lowest percentage of skaters and bicyclists. Finding that the highest incident rate is on the highest volume path is particularly concerning as the demand for shared-use paths and their popularity increases.

Given that this study indicates that frequent collisions and falls occur on shared-use paths and that they often result in some injury, there is a need for safety countermeasures. These study results combined with comments from the survey respondents suggest that countermeasures should include several actions: speed control; clear communication of path operating rules; and finally the consideration that different user types be separated when high volumes warrant. The continuation of high design standards (geometric and traffic control related) is clearly a safety countermeasure, and the nature of these results suggest that older facilities with lower standards may require upgrading in the future.

Finally, due to the high incidence of falls, education, perhaps in the form of signage, could be undertaken so that users are aware of this risk.

Dr. Aultman-Hall’s report, Developing a Methodology to Evaluate the Safety of Shared-Use Paths is available on line at http://www.engr.uconn.edu/ti/Research/jhr04-297_02-2.pdf. If you would like a printed copy, please contact Stephanie Merrall at (860) 486-6446 or smerrall@engr.uconn.edu.

Calendar

Technology Transfer Center Training Opportunities

SEPTEMBER
27-28 OSHA 10-Hour Roadway Construction Training
Road Master Elective, Hartford

OCTOBER
19 Roundtable Discussion: Winter Maintenance Issues
Road Scholar Elective, Hartford
26 Winter Operations
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27 Winter Operations
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For more information on our upcoming programs or to register on line, please visit our web site at www.engr.uconn.edu/ti/Technology/workshops.html
If you have additional questions, please call 860-486-1384.

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- Hear About Prediction Models

Wednesday, September 7, 2005 (1:00 p.m. – 7:00 p.m.)
Equipment Expo and WinterFest 2005 Reception
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One-day Symposium and Equipment Expo

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