

# Technology Transfer



U.S. Department of Transportation  
**Federal Highway Administration**



Vol. 20 No. 2

September 2003

## In this Issue

**Technology Transfer Expo 2003**  
page 1

**By the Way**  
page 3

**Making the Step to Supervisor Successful**  
page 4

**FHWA Unveils New Surface Transportation Security Web Site**  
page 6

**Safe Driving Observances in October**  
page 6

**MUTCD Revision Update**  
page 7

**On-Line "Sites" to Behold**  
page 7

**Calendar**  
page 8

## Technology Transfer EXPO 2003

The Connecticut Technology Transfer Center and Connecticut Highway Street Supervisor Association are once again pleased to be presenting our ever-popular outdoor Technology Transfer Expo. Come join us on Wednesday, September 17 at the University of Connecticut's Depot Campus in Storrs, from 9:00 am to 3:00 pm, rain or shine.

As always, this year's event promises to be an exceptional opportunity to learn more about the public works products, services and resources you need to do your job more wisely, safely and efficiently.

The following vendors, public service agencies and professional organizations are a sampling of those that will be participating:

- 3M Traffic Control Materials Division
- Advanced Drainage Systems, Inc.
- Agresource
- Applied Industrial Technologies
- Artco Equipment Sales, Inc.
- Atlantic Broom Service, Inc.
- Atlantic States Rural Water & Waste Water Association
- Bacher Corp. of Connecticut
- BART Truck Equipment Co., Inc.
- Bearcom
- Bigson II, DBA Equipment Service Co.
- Bobcat of Connecticut Inc.
- Bridge Haven Trucks
- C.N. Wood of Connecticut, LLC
- Call Before You Dig, Inc.
- Capitol Rentals
- Carey Wiping Materials Corp.
- CESCO
- Connecticut Cleaning & Heating Equipment
- Connecticut Highway Street Supervisor Association
- Concrete Systems, Inc.
- Connecticut Department of Transportation
- Connecticut Tree Warden Association
- Connecticut Technology Transfer Center

- D.D. Gregory & Son Equipment Co., LLC
- Dees Fluid Power
- Don Mallon Chevrolet Oldsmobile Cadillac
- East Coast Sign & Supply, Inc.
- East P.B.E. Inc.
- EPPCO
- Federal Highway Administration, CT Division
- Force America Inc.
- Franklin Paint Co., Inc.
- Freightliner of Hartford, Inc.
- Genalco, Inc.
- GIANT-VAC
- Gorman Bros. Inc.
- Hedge & Mattheis Company
- Hudson Liquid Asphalt Company
- Industrial Safety & Supply
- Jamieson Distributors, Inc.
- Jasper Engines & Transmissions
- Kahn Tractor & Equipment, Inc.
- LinksPoint
- New England Municipal Equipment Co.
- Nicard Enterprises, LLC
- Nutmeg International Trucks
- Occupational Safety and Health Administration
- Park City Truck Equipment
- Pete's Tire Barn
- Reed Systems, Ltd.
- Reflexite Americas
- Ro-Brand Products
- Rock Rubber and Supply, Co.
- S & D Supply, LLC
- Safety Town
- SEACO
- Signal 54 Training
- Snap-On Tools
- St. Jacques Family Enterprises, Inc.
- Streetworks, Inc.
- The W.I. Clark Company
- Tri-County Contractor's Supply, Inc.

- Tyler Equipment
- W. H. Rose, Inc.
- Welder Training Services

This year's Public Works Challenge will include stations for Call Before You Dig, Work Zone Safety, OSHA Fall Prevention, and Backhoe Operation. Open to all municipal employees, the Challenge is a great way to test your knowledge and skills. Prizes will be awarded to the top three overall winners.

Technology Transfer EXPO 2003 is free and open to all. For complimentary tickets, please call the Connecticut Technology Transfer Center at 860-486-5400.



*A view from last year's  
Technology Transfer EXPO*

## **Technology Transfer**

Published by the:  
**Connecticut Transportation Institute  
Technology Transfer Center**

Phone: 860-486-5400

Fax: 860-486-2399

Web: [www.cti.uconn.edu](http://www.cti.uconn.edu)

Supported through a cooperative effort of the Connecticut Department of Transportation and the Federal Highway Administration's Local Technical Assistance Program (LTAP) to provide information on the latest transportation technology to Connecticut's state and local government officials.

**Director**

Donna Shea  
[shea@enr.uconn.edu](mailto:shea@enr.uconn.edu)

**Workshop Coordinator**

Mary McCarthy  
[mary.c.mccarthy@uconn.edu](mailto:mary.c.mccarthy@uconn.edu)

**Information Services Coordinator/  
Editor**

Stephanie Merrill  
[smerrall@enr.uconn.edu](mailto:smerrall@enr.uconn.edu)

**Web Master**

Deborah Barrett  
[dbarrett@enr.uconn.edu](mailto:dbarrett@enr.uconn.edu)

## By the Way...

Donna Shea, Director  
Technology Transfer Center



Excitement is building here at the Connecticut T<sup>2</sup> Center, as we get closer to this year's Construction Career Day. This year's two days of events will be held on October 7 and 8 at the Mountainside Recreational Facility in Wallingford, CT. We already have over 1,200 high school students registered and we are still accepting registrations for exhibitors. The group of exhibitors we have currently registered has put together a very exciting array of hands-on activities for the students. The planning committee learned a great deal during our first experience last year and we feel this year's program will be even better.

The sponsors for this year's event include:

- Connecticut Department of Transportation
- Connecticut Technology Transfer Center
- Connecticut Construction Industries Association
- Federal Highway Administration
- Several of New England's Skilled Labor Unions

What brings all of us together to work on this event? We recognize that attracting and retaining the skilled workforce required to build, maintain, and operate our surface transportation system will require going beyond "business as usual." We recognize

the investment involved in putting this program together, but we also realize that the cost of not doing anything will be even greater.

Despite the successes of the past, the United States' transportation program will be hard pressed to meet the challenges of the future as the demands for safety and efficiency grow faster than available resources. The Connecticut Construction Career Day is one small step toward ensuring that our transportation workforce needs are met in the future.

### What are others doing in the area of workforce development?

#### **AASHTO TRAC Program**

Transportation in Civil Engineering (TRAC) program sends volunteer transportation professionals into secondary schools with materials and presentations to engage students in solving real-world problems.

<http://www.trac.net>

#### **Transportation Workforce Development Web Site**

This site provides information about workforce issues, including an international scan, innovative

practices, workforce studies and policy decisions.

<http://www.nhi.fhwa.dot.gov/transworkforce>

#### **Construction Career Days Around the Country**

Connecticut is one of 20 states that have held Construction Career Days. This site provides information on this initiative throughout the United States.

[http://members.tripod.com/constr\\_career\\_days/](http://members.tripod.com/constr_career_days/)

#### **National Transportation Week**

National Transportation Week highlights the importance of transportation, recognizes those who work in the transportation industry, and focuses on making youth aware of transportation-related careers.

<http://www.ntweek.org>

#### **Garrett A. Morgan Technology and Transportation Futures Program**

This site is sponsored by the U.S. Department of Transportation to promote transportation to K-12 students.

<http://education.dot.gov>

Sources:

- Transportation Research Board Special Report 275, *The Workforce Challenge*, at [www.trb.org](http://www.trb.org).
- *LTAP Journal*, a newsletter of the Federal Highway Administration's Local Technical Assistance Program, First Quarter, 2003.

# Making the Step to Supervision Successful: How to Become a Leader

Many public works managers are promoted from within their department. For people good at their jobs, being promoted is easy. The next part is hard: making the successful move from taking orders to giving them and becoming a leader. This article will discuss how to gain the respect of the crew, along with delegation, and leadership styles necessary to become a successful leader.

## Earning Respect

As a new supervisor, it is vital to gain the respect of the employees. There are several things to consider when attempting this challenge. Good managers:

- Know that trust is fostered through good communication.



- Stand up for the ideas and work of the employees.
- Are positive in their assessments and judgments.
- Cultivate a sense of fairness and demonstrate competence.

## Delegate

It is impossible to do many jobs well. Therefore managers must learn the art of delegation. They must let go of their old job and delegate tasks not related to planning, organizing, staffing, leading or controlling. Although the ultimate responsibility for work is the supervisors', they should recognize employee strengths and delegate based upon them.

To cultivate a strong team spirit, delegate work and responsibility based on employees' strengths, not weaknesses. People enjoy doing things for a supportive manager. This insures cooperation and pride in the work. Supportive managers:

- Understand the needs and expectations of employees.
- Ensure that employees are clear regarding what is considered improved performance.
- Establish an objective system for measuring progress.

Managers become role models by setting a personal example of doing things "right" and doing the "right things right."

## Qualities of Leadership

Effective leaders serve several critical roles in an organization. They display the following abilities:

1. Articulate a vision that compels people to commit their time, energy and resources to complete it.
2. Determine the strategies and goals that will best serve the vision.
3. Create the structures and processes for an organization from which results are produced.
4. Engage and enlist employees to achieve the vision quickly.
5. Shift self-limiting beliefs and frames of reference to a culture of possibility rather than constraint.

## Forms of Leadership

Understanding leadership qualities is important to those making the transition to supervisor. According to most experts, there are three major methods of leadership:

### *Democratic*

This manager seeks ideas and suggestions through discussions. Whenever possible, good leaders will treat individual problems and situations on a democratic basis.

The democratic style works best when people are lacking information. Employees can provide input to help make the best possible decision. It also works well with a large number of experienced, cooperative people.

### *Autocratic*

The autocratic leader assumes full responsibility for all actions—individual and group. This manager seeks obedience to specific

orders, determines policy, and considers decision-making his/her prerogative.

The autocratic style is best when quick decisions and fast actions are necessary. Staffs of largely untrained and undisciplined people require an autocratic leadership. Firm and decisive force can make such organization productive.

### *Free Rein*

This leader exercises little direct control, but is the prime source of information, suggestions, and authority. This works best if the staff is well trained, responsible and professional. This is successful in public works when people working in the field have to make decisions with little direct supervision. Within certain limits, individuals are allowed to set their own goals. This often results in outstanding performance.

With a highly trained and professional staff, free-rein leadership is most appropriate. These individuals are generally creative and solve problems as they encounter them, requiring much less guidance.

A mixture of styles works best with a dispersed organization that seldom meets and is made up of strong individualists.

### **Methods of Leadership**

The best approach to leadership may have to be tailored to the individual requiring leadership. Therefore it is dependent upon the person, situation, and organization.

*Individual.* Some people only perform well when a certain type of leadership is used. When leadership is a problem, review the personality characteristics of each

employee. Experiment to determine what style of leadership to use with each person. Reevaluate if problems arise.

*Situational.* Changes in the services, customer crises, and policy changes can make new demands on the type of leadership required.

*Organizational Flavor.* The total make-up of an organization reflects the type of leadership that should be used. Sometimes group needs and individual needs are quite different.

### **Combining Methods and Styles**

Leadership success depends on the flexibility of the leader to recognize the employees' needs and their willingness to change gears. Leaders determine what is best for each individual and each situation, with periodic evaluations of employees and their own operating style.

The best leaders continually refine their leadership to build loyalty. They focus on developing a successful team with extra effort and support, demonstrating loyalty to both the department and employees.

### **How to Get There**

To facilitate leadership skills, new supervisors should:

- Recognize that leadership is an everyday occurrence. A leader influences results as well as employee beliefs and behavior.
- Learn facilitative leadership skills such as listening, coaching, managing group dynamics and conflict, and leading with confidence.
- Regularly measure the results in context of the departmental

goals. Set specific goals that have a direct link to the strategic goals.

- Ask daily: "To what degree does this program or initiative move the department towards its goals?"
- Rely on regular feedback from residents, employees, and management.
- Recognize that part of the department's success is measured by those served.

Managers who lead with distinction create rather than manage change. They are perceived as decisive and responsible risk takers. They change their leadership style based upon situations that arise and the employees they manage. With leadership, one size doesn't fit all. Knowing that is the biggest hurdle for leaders to overcome.

Sources:

- "How to Improve Your Leadership Ability," *HR Focus*, Vol. 77, No. 1, January 2000.
- "Make the Step Up to Supervisor a Successful One," *Technology Transfer Quarterly*, Ohio LTAP, Vol. 9, No. 2, 1994.
- "Improving your Leadership Skills," *Public Relations Quarterly*, Vol. 44, No. 1, Spring 1999.

From an article by Kathy L. DesRoches, Assistant Director of the New Hampshire Technology Transfer Center. Reprinted with permission from *Road Business*, Vol. 16, No. 2, Summer 2001.

## FHWA Unveils New Surface Transportation Security Web Site

The Federal Highway Administration (FHWA) recently announced a new web site to provide state and local agencies simple access to information on improving security in the operation of the surface transportation system.

"The need to ensure the security of America's surface transportation system is a top priority for the FHWA," said FHWA Administrator Mary E. Peters. "We are working closely with the Department of Homeland Security and other federal agencies to help state and local officials develop and carry out a comprehensive set of improvements to increase the security of our transportation network."

Peters said that the key element in this plan is providing state and local agencies with valuable information that can help them to make wise decisions to improve the security of roadway operations in their areas.

The new "FHWA Operations Security" web site at [www.ops.fhwa.dot.gov/OpsSecurity](http://www.ops.fhwa.dot.gov/OpsSecurity) is part of the FHWA's efforts to help state and local transportation agencies develop initiatives to improve security through effective planning, operation and application of technology.

A section on the site offers specific information on how to plan effectively for managing emergencies, how to align action plans with the nation's Homeland

Security Advisory System, and how to improve military mobilization on roadways. Roads are the primary means of responding to an incident. All emergencies and incidents have a transportation component, and roads are the critical means through which response and recovery strategies can be carried out.

An extra benefit is that many of the measures that improve security also improve transportation's ability to handle natural disasters such as hurricanes and earthquakes.

The FHWA developed the site in response to the expressed need on the part of state and local partners for technical guidance and best practices. The new site links to the information on transportation security from all of the U.S. Department of Transportation's administrations, from other federal agencies, and from the associations participating in the National Associations Working Group for Intelligent Transportation Systems. The web site also links to articles, research, and other information related to transportation security.

Additional information on traffic operations is available at [www.ops.fhwa.dot.gov](http://www.ops.fhwa.dot.gov).

From Federal Highway Administration Press Release FHWA 21-03, dated June 27, 2003.

## Safe Driving Observances in October

***Put the Brakes on Fatalities Day***  
October 10



**Slow down, buckle up and drive sober!**

For more information, visit [www.brakesonfatalities.org](http://www.brakesonfatalities.org).

***Drive Safely Work Week***  
October 6-10



**Safe Driving is Everyone's Business**

For more information, visit [www.trafficsafety.org](http://www.trafficsafety.org).

## MUTCD Revision Update

The Federal Highway Administration now anticipates



that the long-awaited Final Rule on Revision 2 of the *Manual on Uniform Traffic Control Devices* will be published in the *Federal Register* in October.

By the time the docket comment period on the proposed revisions had ended in August 2002, FHWA had received over 280 letters containing well over 5,000 comments to review and analyze.

The Final Rule will describe FHWA's final decision concerning requests for changes to the Manual. The decision is

based on the docket comments and/or other information received and can include the following: adopt a change, defer the change pending further research, or adopt a modification to the change.

The full "Notice of Proposed Amendments" is posted on the MUTCD web site at [http://mutcd.fhwa.dot.gov/kno-millennium\\_npa.htm](http://mutcd.fhwa.dot.gov/kno-millennium_npa.htm).

The "MUTCD Proposed Revision No. 2 Change List" is also posted on the site at <http://mutcd.fhwa.dot.gov/pr2cl.htm>.

## On-Line "Sites" to Behold Selected Web Sites for Useful Information

### Federal Highway Administration Safety Program Links:

#### **Highway Safety Media Center**

(links to Publications, Videos and CD's)  
<http://safety.fhwa.dot.gov/media/category.htm>

#### **Highway-Rail Grade Crossing Safety**

<http://safety.fhwa.dot.gov/programs/x-ing.htm>

#### **Intersections**

<http://safety.fhwa.dot.gov/programs/intersections.htm>

#### **Moving Safely Across America**

<http://safety.fhwa.dot.gov/programs/msaa.htm>

#### **Older Driver**

<http://safety.fhwa.dot.gov/programs/olderdriver.htm>

#### **Pedestrian/Bicycle Safety**

[http://safety.fhwa.dot.gov/programs/ped\\_bike.htm](http://safety.fhwa.dot.gov/programs/ped_bike.htm)

#### **Speed Management**

<http://safety.fhwa.dot.gov/programs/speedmgnt.htm>

#### **Stop Red Light Running**

<http://safety.fhwa.dot.gov/programs/srlr.htm>

#### **Work Zone Safety**

<http://safety.fhwa.dot.gov/programs/wsz.htm>



# Calendar

## **Flagger Certification**

*A Connecticut Road Master Program Elective Workshop*

- October 1 in Storrs
- October 2 in Storrs

## **Context Sensitive Solutions**

*A Connecticut Road Master Program Elective Workshop*

- October 9 in Hartford

## **Roundtable Discussion on Asphalt**

*A Connecticut Road Scholar Program Elective Workshop*

- October 15 in Hartford

## **Design for Pedestrians and Bicycles in Connecticut**

*A Connecticut Road Scholar Program Elective Workshop*

- October 16 in Storrs

## **Chainsaw Safety**

*A Connecticut Road Master Program Elective Workshop*

- October 22 in Storrs

**For more information on training programs, call the Connecticut Transportation Institute at 860-486-1384.  
Please visit our on-line Workshop Schedule information for updates and take advantage of our  
on-line workshop registration form at [www.cti.uconn.edu/ti/Technology/Workshopsched.htm](http://www.cti.uconn.edu/ti/Technology/Workshopsched.htm).**

STORRS, CT 06269-5202  
UNIT 5202  
179 MIDDLE TURNPIKE

UNIVERSITY OF CONNECTICUT  
**Transfer Technology**

CONNECTICUT TRANSPORTATION INSTITUTE

NON-PROFIT ORG.  
U.S. POSTAGE  
PAID  
STORRS, CT  
PERMIT NO. 3