ADA Angst

New interpretation of ADA Requirements gives agencies opportunity to reassess the Compliance to Accessibility Law

by Tom Kuennen

Pavement preservation stakeholders in the United States are concerned that a reinterpretation of the Americans with Disabilities Act last year by the U.S. Department of Justice (DOJ) and U.S. Department of Transportation (DOT) will lead to disruption of low-cost pavement preservation programs in this country.

Transportation Gets Social
by Tom White

March 17, 2011, was a day for celebration. Not just with shamrocks, corned beef, and green-colored beverages - it was St. Patrick’s Day, after all - but also with posts, likes, and views. Because on that day, the Federal Highway Administration (FHWA) launched its first social media sites on Facebook and YouTube™.
Letter from the LTAP Director

After almost 4 years with the Technology Transfer Center, it is with a heavy heart that we say goodbye to Beth Hamilton. She started here in February, 2011 as the Program Assistant, and in September of that year moved into the position of NH LTAP Program Manager. In her tenure we adopted a new logo, designed and implemented a new training database, and developed new workshops.

Beth’s enthusiasm was infectious and it has been an absolute pleasure to work with her. We wish her the very best in her new position as the Office of Economic Development Program Coordinator in the City of Nashua. She will definitely be missed!

In other news, we are happy to announce our “Build a Better Mousetrap” competition! This purpose of this competition is to highlight the innovative improvements made by Public Works employees. It can be anything from the development of tools, equipment modifications, and/or processes that increase safety, reduce cost, improve efficiency, or improve the quality of transportation. We will be accepting entries starting in January, with a deadline of May 1, 2015; the winner will be announced in June. The winner of the NH competition will be automatically entered into the national competition, whose winner will be announced in July at the LTAP Annual Meeting. We have also arranged for all NH entries to be showcased at the 10th Annual Ken Ward Memorial Plow Rally on September 16, 2015.

Additionally, we prepared and sent out a Needs Assessment for the LTAP Program, both in electronic and hard copy formats. We appreciate everyone who has completed it so far, and look forward to receiving many more responses by the deadline of February 28. It’s our intention to use the information received through your responses to help tailor our Program according to what everyone has requested. So please send in your responses!

Lastly, we are hard at work putting together workshops for the Spring Session, and plan on having a Training Calendar up by the mid-to-late February. Until then, enjoy the winter months!

Amy Begnoche
LTAP Director
Technology Transfer Center
Seasonal Safety Tips  

*by Alanna Gerton, Technology Transfer Center*

The leaves have turned, fallen, and are now a distant memory. Every seasoned New Englander knows what this means - winter is coming. Time to dress in seven layers, crank up the heat, and hope that wintery mix the meteorologist mentioned won’t wreak havoc on your morning commute. Although we can’t ask Mother Nature to hold off on that Nor’Easter until the weekend, we can do our best to be prepared for whatever she throws our way. Here are some helpful tips on sharing the road with plows, and everything you need to add to your winter survival kit.

**In Case of Emergencies**

When there is impending winter weather coupled with poor driving conditions, it’s best to stay off the roads if possible. Always try and stay one step ahead of the storm! On the off-chance that you do get caught up in a Nor’Easter, here’s a list of winter essentials to keep in your car.

- Shovel
- Ice scraper and snow brush
- Jumper cables
- Bag of salt or cat litter
- Properly inflated spare tire, wheel wrench and tire jack
- Tool kit
- First aid kit
- Flashlight and spare batteries
- Non-perishable, high energy foods
- Drinking water

**Share the Road!**

- Always leave space between you and the plow - about 4 carlengths. Snowplows are usually spreading deicing materials from the back of the truck, so it’s best to avoid tailgating or trying to pass.
- Snowplows can throw up a cloud of freshly plowed snow, which often reduces visibility for drivers following too closely.
- Reduce your speed when driving in snowy, wet, or icy conditions.
- Allow for additional stopping time when approaching intersections, off-ramps, and bridges.
- Avoid using cruise control during a winter storm- you need to be in control of your vehicle!
- Spreaders on trucks can throw salt, sand or cinders that can damage close-following vehicles.
- On multiple lane roads, watch for snowplows operating in either lane.
- Plow truck operators have to focus on snow removal, and their field of vision is restricted. Even though you can see them, they may not see you.
- Always have your headlights on, plenty of fuel, and tires with ample tread.

Tips compiled from:
http://www.modot.org/kansascity/winter_driving/Drivingaroundsnowplows.htm
New Hampshire Roads Scholars

The first achievement level is Roads Scholar Level I. To achieve Level I, participants must complete 25 hours of training. Roads Scholar Level II requires 50 hours total, including 25 hours in technical training, 5 hours of supervisory training, 5 hours of tort/liability or safety, and 5 hours dedicated to environmental training. The third achievement level of the program is becoming a Senior Roads Scholar. Senior Roads Scholars have completed 75 hours of training including the requirements for Roads Scholar Level II. Master Roads Scholar is the fourth and highest achieving level of the UNH T² Center Roads Scholar Training Program. To be a Master Roads Scholar, the participant must have completed 100 training hours, including the requirements for Roads Scholar Level II. We congratulate all those who have reached new achievement levels and encourage further training in the future.

Roads Scholar I

25 training hours in the Roads Scholar Program

- Michael Aborn, Bow
- David Alden, Wolfeboro
- Michael Alexuk, Derry
- Jeremy Bedard, Pelham
- Dale Bevilacqua, Eastman Community Association
- Steven Boyd, Derry
- Moses Delphia, Hanover
- Ray Dow, Ashland
- James Eddy, Jaffrey
- Seth Garland, Wakefield
- Patrick Higley, BAE Systems
- Allen Johnson, Hinsdale
- Douglas Lemery, Wolfeboro
- Leigh Nichols, Wakefield
- Fred Potter, Hinsdale
- John Radcliffe, Farmington
- Fred Stearns III, Lyme
- Jeffrey Storey, Laconia
- Dan Thompson, Ashland
- Glenn Vallee, Concord
- Eric Williams, NH DES
- Michael Yergeau, Goffstown

Roads Scholar II

50 training hours and Roads Scholar II requirements

- Lee Adams, Rye
- Scott Carey, Lebanon
- Craig Clairmont, Belmont
- Richard Collins, Plainfield
- David Condon, Claremont
- James Doucette, Barnstead
- Noel Gourley, Bow
- Craig Hoffman, Pelham
- Mike Howe, Dublin
- George Maloney, Goffstown
- William Scanlon, Newport

Senior Roads Scholar

75 training hours and Roads Scholar II requirements

- Wayne Almon, Exeter
- Jason Brown, Seabrook
- John Emery, Jr., Wentworth
- Robert Harrington, New London
- Jason Rucker, Exeter
- Leon Smith, New Durham

Master Roads Scholar

100 training hours and Roads Scholar II requirements

- Peter Companion, Claremont
- Thomas Cummings, Deering
- Craig Dunn, Moultonborough
- Brian Eldredge, Pittsfield
- David Hooley, Croydon
- Alan E. Jones, Hampton
- David Morrison, Milford
ADA Angst

The technical advisory requires that curb ramps and other upgrades be mandated for a variety of thin pavement preservation surface treatments that heretofore had been defined as maintenance, and therefore did not require upgrades until alterations were made to the road.

This unfunded mandate could set the pavement preservation mantra of “the right treatment to the right road at the right time” on its head, with cost pressures resulting in the wrong treatment to the wrong road at the wrong time, or no treatment at all if the ADA curb ramp installation costs are too high.

But at the same time it could lead to a reassessment of an agency’s compliance with the ADA as the agency inventories which intersections need remediation, and which don’t, regardless of the status of its pavement preservation program.

Title II of the Americans with Disabilities Act of 1990 (ADA) requires that state and local governments make sure that persons with disabilities have access to the pedestrian routes in the public right-of-way. An important part of this requirement is the obligation that, whenever streets, roadways or highways are altered, curb ramps be provided where street level pedestrian walkways cross curbs.

For decades, states, counties and municipalities should have “ADA plans” in place, thus have a program for providing curb ramps, in many cases installing curb ramps even without the trigger of pavement “alteration.” Programs for curb reconstruction to provide curb cuts without associated pavement reconstruction has kept these agencies ahead in the game.

During those same decades, the pavement preservation movement gathered steam, and now many preservation programs are in place at all levels of government, with pavement inventories and condition databases used to program preservation work. But, the new ADA guidance from inside the Beltway does not take the existing ADA plans into consideration, and the guidance creates contradictions in prioritizing ADA work and pavement preservation programs.

Preservation saves roads, money

Proponents maintain that pavement preservation techniques are cost-effective and environmentally sustainable strategies that extend the life of pavements before they deteriorate substantially. They add that pavement preservation is like changing the oil in your car, or painting your house: a smaller upfront investment avoids high future costs of reconstruction and rehabilitation.

For roads, these techniques include preventive maintenance surface treatments such as slurry surfacings, crack sealing, chip sealing, micro surfacing, surface rejuvenation, hot and cold in-place recycling, thin-lift hot-mix asphalt paving, and concrete pavement restoration.
Pavement preservation methods prolong pavement life, says the National Center for Pavement Preservation (NCPP), avoiding high future costs of reconstruction or rehabilitation through the expenditure of lesser amounts of money at critical points in a pavement’s life. Experience shows that spending a dollar on pavement preservation can eliminate or delay spending $6 to $10 on future rehabilitation or reconstruction costs, NCPP says.

Previously, pavement preservation treatments weren’t considered road alterations that would trigger ADA requirements. But following the new guidance released last year, under the ADA, some pavement preservation treatments now require costly accessibility features such as curb ramps be installed as part of the project, while other preservation treatments don’t.

Projects now deemed to be alterations must include curb ramps within the scope of a project. These include micro surfacing, thin-lift overlays, open-graded surface courses, cape seals, mill-and-overlays, and hot in-place recycling.

Projects deemed to be maintenance, and exempt from curb ramps, include crack and joint filling and sealing, surface, chip, slurry, scrub and fog seals, concrete joint repairs and dowel bar retrofits, spot high-friction treatments, undersealing, diamond grinding, and pavement patching.

“This recent DOT/DOJ interpretation changing long-standing FHWA practices threatens to take away several cost effective maintenance ‘tools’ for government agencies,” said FP2 Inc. executive director Jim Moulthrop, P.E. “Our experience is showing that the right treatment, for the right road, at the right time, is put at risk by the new ADA guidelines, which can even lead to no treatment if it’s perceived that the right treatment would lead to unaffordable capital improvements. This is counterproductive to road maintenance programs achieving ADA goals, and flies in the face of the pavement preservation language of our federal surface transportation legislation, MAP-21.”

**Survey shows California impact**

That’s borne out by a survey this spring of local governments in California that shows the impact that the ADA guidance will have on local governments that now must recalibrate their pavement preservation programs to accommodate the cost of compliance, or change strategies completely.

The survey was conducted in May by Ding Cheng, Ph.D., and Gary Hicks, Ph.D., of the California Pavement Preservation (CP2) Center at the California State University-Chico. Nearly 260 road professionals answered – of whom 62 percent were from local agencies, and 25 percent from state or federal agencies – and the survey found that more than 63 percent of respondents believe the new interpretation of what is considered alteration and what is considered maintenance will greatly impact their ability to maintain their roads.

Preservation treatments like micro surfacing, cape seals, thin and ultrathin HMA, and in-place recycling now are considered by the new rules to be alterations that will require curb ramps and amenities. More than 90 percent of respondents said they currently use these treatments, but 54 percent said they’d no longer use them in the face of the new ADA interpretation.

Would the new ADA interpretation lead to deferred projects? Some 65 percent of respondents said it would; 55 percent said it would increase the cost of roads by 20 to 40 percent, 34 percent by 40 to 60 percent, and 11 percent of respondents believe they will see 60 to 80 percent increases in their road costs.
Nearly 70 percent of respondents said the new ADA guidance will cause them to shift away from treatments that have worked well in the past, and 75 percent said it would lead to deferred maintenance.

“The new interpretation of what is considered as alteration and what is considered as maintenance will affect agencies’ ability to maintain roads,” Cheng and Hicks say. “Agencies may decide to no longer use surface treatments, such as microsurfacing, cape seal, or in-place recycling, if they require the installation of curb ramps. The technical advisory will cause agencies to defer preservation projects, and increase project costs by 20 to 40 percent or more.”

Transition plan will help

Regardless of the status of local agency pavement preservation programs, existing federal laws for years have required that agencies with authority over streets, roads or walkways to have developed a transition plan and complete structural changes like curb ramps by Jan. 26, 1995.

“If agencies have complied with these long-standing program access regulations, most needed curb ramps will already be in place,” said Doug Hecox, FHWA acting associate administrator for public affairs, as reported in California Asphalt Magazine. “The joint [technical advisory] addresses remaining barriers between sidewalks and streets to provide access to pedestrian facilities for more than 30 million people with disabilities based on the 2010 Census data.”

Thus whether they have preservation programs or not, agencies without their full complement of curb ramps and other amenities need a transition plan from their current state to a network that is fully accessible and ADA-compliant, says Steve Mueller, P.E., president, Stephen Mueller Consultancy in Colorado.

Mueller, who just launched his consulting practice after retiring as pavement and materials engineer for the Federal Highway Administration’s (FHWA) Colorado Resource Center, has a long history of involvement with pavement preservation, pavement recycling, and asphalt materials and construction. He also is a former district engineer for the Asphalt Institute, and pavement management engineer for Aurora, Colo.

“The law is designed to provide pedestrian mobility to everyone in our society,” Mueller tells Better Roads. “Agencies need to understand how accessible their roads currently are, and develop a good inventory of ramps and other access features, such as sidewalk width and anything else needed to accommodate people who are physically challenged, and make the changes they need,” Mueller said.

Colored “truncated domes” or tactile indicators are required for citizens with vision problems, he said. “They are detectable with canes and by foot,” he says. “If a signal is present an agency would have to implement audible signals. The agreement between the DOT and DOJ said ‘if you are doing any alterations to the paving surface, the roadway must be made completely accessible.’”

The issue then becomes which preservation treatments make for alterations, and which don’t. “Microsurfacing and slurry surfacings are close to the same product, except for polymer modification in the former,” Mueller says. “If slurry seals are a maintenance technique, and microsurfacing an alteration, it does not make any technical sense whatsoever. I am very concerned about the engineering principles that were applied in this agreement, and that the DOT decisions were taken at a high level without adequate technical involvement and review. When basic engineering principles are ignored, and basic materials aren’t well understood by the people putting these agreements together, the outcome won’t technically be what it should have been.”

Nonetheless, as a civil rights issue, compliance with the ADA is obligatory to all public agencies, Mueller says. “The lack of technical involvement doesn’t mean agencies shouldn’t be following the civil rights function of the law,” he says. “The law has been in effect for more than 25 years now, and many local communities – and some state DOTs – have not been complying with the law. Their attitude was that it was just another unfunded mandate, and they were ignoring the law
and not creating the transition plan that should have been there. If the agencies had been doing their transition planning, this agreement might not have been necessary.”

Note: A guide to the requirements of Title II of the Americans with Disabilities Act relating to curb ramps at pedestrian crossings may be found online in the DOJ’s ADA Toolkit: visit ada.gov/pcatoolkit/ch6_toolkit.pdf.

NOT A FEDERAL FUNDING ISSUE

Also, the mandate being a civil rights issue means that it has nothing to do with whether an agency receives federal funds, said Robert Mooney, pre-construction team leader, FHWA, at the combined annual meetings of the Asphalt Recycling & Reclaiming Association, Asphalt Emulsion Manufacturers Association, and International Slurry Surfacing Association in February. “It applies to all entities: all agencies, all states, towns, counties, even if they are not recipients of federal funds,” he said. “If [your project] is not in compliance with the law, even though it’s not federally funded, if there is a complaint from a citizen you will be held responsible.”

Originally, the DOJ proposed that any preservation work other than a pothole repair was to be considered an alteration, requiring that accessibility be provided, he said. “To them, the only maintenance item was a pothole,” Mooney said. “That was our starting point.”

But in 2013 DOJ and DOT continued the dialogue, based on information from states and towns, contractors, and complaints about how unevenly the guidance was being enforced, Mooney said. The appearance was that preservation equipment was being utilized, but no curb ramps were being installed. “It was the Department of Justice’s point of view that if the public perception was that major work was going on a roadway, that we [would] need to address accessibility for all the public,” he said.

Mooney was asked what the ramifications would be for an agency that did not upgrade curbs. “[While] it depends on the exact scenario, a complainant – a citizen putting in a complaint – will be able to go to court and sue, and they would most likely win,” Mooney said. “The agency would be held responsible in the lawsuit.”

He also said that if FHWA found that an agency was not in compliance, it could withhold funds for unrelated projects until the project in question had been rectified. “If we get wind of it and find there is truth to it, other projects could be affected,” Mooney said. “They can withhold funds for Project B until Project A is handled properly.”

TOWARD A SENSIBLE SOLUTION

There is no easy way out of the predicament, experts close to the situation say. “California’s counties have long been a strong advocate for disabled access and the implementation of the American Disabilities Act,” said Scott McGolpin, director of public works for the county of Santa Barbara and president of the County Engineers Association of California, as reported by the California Asphalt Pavement Association, in CalAPA’s magazine California Asphalt.

“We recognize people with disabilities need and deserve safe access to freely move within their communities,” McGolpin said. “Counties have adopted cost-effective strategies to maximize our limited financial resources to preserve all of our transportation infrastructure.”

The new federal guidance, however, places additional hardships on cities and counties, he said. “Unfortunately, the new ADA Joint Technical Assistance forces local governments to modify existing infrastructure at significant additional costs, including reconstructing existing ADA accommodations that met previous federal standards. Consequently, it will minimize counties’ abilities to provide new access to other areas of the community.

“Despite this impractical update,” he adds, “counties will strive to reach substantial compliance without any additional resources to meet this unfunded federal mandate. Counties welcome the opportunity to work with federal partners to come up with a sensible solution.”

Reprinted with permission from Better Roads Magazine

www.BetterRoads.com
Transportation Gets Social

Social media tools are dramatically changing the way people relate to each other and connect to the world around them. Even the most conservative estimates from 2013 put the total number of Facebook users at more than 500 million. Younger generations now view email as passé, preferring to interact via Facebook, text messages, and “tweets” on Twitter.

In addition, many people no longer print and keep photographs in glossy albums. Instead, they share them across the Internet using image sharing sites like Flickr. YouTube, a video-sharing site, is the second most popular search engine on the Internet--second only to Google™. YouTube’s own statistics claim more than 6 billion hours of video are viewed each month.

FHWA leadership recognizes the effects that social media use is having on people’s everyday lives and the opportunities these outlets afford for communication within the transportation world. Just a year after launching a presence on Facebook and YouTube, FHWA expanded its social media efforts two-fold by joining Twitter and Flickr in June, 2012.

Here’s a look at how FHWA uses social media to help fulfill its mission and vision, and how the agency’s use of these sites has evolved over the last 3 years.

FHWA’s Approach To Social Media

Social media outlets provide channels through which organizations can engage followers, build interest, seek public input, and encourage followers to take action. Not just for computers anymore, social media tools are available on a variety of mobile devices, including smartphones and tablets, as well as on some television sets known as smart TVs. Once posted, information is available from almost anywhere at any time.

Before FHWA ever set foot in the world of social media, the agency considered many questions regarding the use of these services. Would social media be a good fit given the agency’s mission (or any Federal agency’s mission)? What are the benefits? The costs? How is social media useful in the work environment?

To answer these questions, FHWA formed a group of 12 individuals in October, 2010, to study the impacts of social media, and to determine whether it would be appropriate and beneficial for agency use. The group consisted of representatives from the U.S. Department of Transportation’s Office of the Chief Information Officer, and the FHWA Offices of Public Affairs, Chief Counsel, and Administration, among others. The group examined security and privacy concerns, discussed copyright issues, and consolidated agency messaging. After 4 months of planning and discussion, the group decided to move forward with Facebook and YouTube as FHWA’s initial social media channels. The group authored FHWA’s Social Media/Web 2.0 directive (FHWA Order 1370.14), and Administrator Victor Mendez signed it on March 16, 2011. FHWA officially launched its Facebook page and YouTube channel the next day.

Agency officials now have a better grasp on answers to concerns surrounding the appropriateness and benefits of social media use and have found that using social media helps to build and maintain relationships with a variety of stakeholders quickly and easily.

FHWA focuses its social media efforts on grassroots outreach, celebrating the agency’s successes and acknowledging the work of contributors, including State departments of transportation (DOTs) and other partnering organizations. The agency engages and interacts with its social media audiences by posting relevant, timely information about ongoing or completed projects and initiatives. Other uses include recruiting potential employees, promoting events, and sharing photographs and video clips from recent events and speaking engagements. The ability to share information quickly and receive instantaneous reactions from the public helps FHWA gain insights into what its audiences really are interested in.
Why Facebook?

Today, Facebook is one of the world’s largest and most popular social media sites. Among other things, Facebook enables individuals to share articles, photographs, and videos. The site also serves as a sort of news ticker service for its users. For example, a registered Facebook user can link to FHWA’s Facebook timeline simply by clicking the “like” button. The user, who can customize the kinds of alerts he or she gets, will then receive notifications each time FHWA posts something new on its Facebook page.

“It was one of the first social media platforms that we joined back in 2011, and it continues to be one of our most popular efforts,” says Diana Williams, manager of the Office of Public Communications, which is housed within the Office of Public Affairs and oversees FHWA’s Web and social media activities. FHWA shares various types of information with its Facebook audience, including news items; event details; information on new technologies, publications, and reports; employment vacancies; and other hot topics. Facebook users can comment, like, or share this content and leave feedback on FHWA’s Facebook timeline.

Why YouTube?

YouTube offers an opportunity for FHWA to share videos with both broad and targeted audiences. FHWA can share videos publically with an Internet-wide audience, or it can share videos on unlisted channels for private, targeted messaging (such as for training classes). YouTube uses a standardized video codec, a device capable of encoding and decoding a digital data stream, to reach more viewers. In the simplest terms, that means users no longer have to download multiple media players (for example, Windows Media Player, Apple QuickTime, or RealPlayer) to watch videos created for different platforms. Instead, anyone with a computer or a smart device - smartphone, tablet, or smart TV - linked to the Internet and running on Windows, Apple iOS, Android, or Linux operating systems can watch a YouTube video.

The FHWA YouTube channel has nearly 150 videos available to the public, covering topics such as National Work Zone Awareness Week, modern roundabouts, and road safety audits. FHWA also creates and shares video series, such as “FHWA Works,” which showcases how FHWA employees help and benefit the American public through the work they do.

YouTube also enables users to interact with FHWA’s content in several ways. Users have the option to subscribe to the channel and receive notifications when FHWA posts new videos. From FHWA’s YouTube page, users can watch and rate videos, leave feedback, and share or embed links to the videos on their Web sites. And, all of FHWA’s YouTube content is compliant with Section 508 of the Federal Rehabilitation Act (that is, it is captioned for the hearing impaired).

Why Twitter?

Twitter is a social networking and microblogging service that lets users broadcast messages of 140 characters or fewer to their networks of contacts or “followers.” This service enables FHWA to reach a larger audience with its messages, interact with stakeholders in new ways, answer questions promptly, and provide vital information quickly.

“Expanding our social media presence to Twitter just made sense because it is an almost expected companion to Facebook,” says Williams.

Through Twitter, FHWA posts messages to and receives messages from its network of followers. Instead of sending dozens, or even hundreds or thousands, of emails or text messages individually, Twitter sends one message to all of FHWA’s followers simultaneously. The character count limitation demands brevity and enables FHWA to disseminate quick, concise updates and brief snapshots of information.

Twitter also is the perfect outlet for information that may not be suited for Facebook, such as road closures, because Twitter is often the social media tool of choice for individuals who just want quick pieces of information. The outlet also enables followers to share FHWA’s “tweets” with all of their followers (known as “re-tweeting”), reaching an even wider audience with the messages.
Why Flickr?

Flickr is an image-hosting service that enables FHWA to share photos and embed them in other social media and Web sites. The images can be in varying resolutions - lower for onscreen viewing or higher for printing.

Flickr is a valuable social media site for FHWA because images talk. Research shows that social media posts and news stories accompanied by images attract a lot more views than text-only posts and stories.

FHWA has a large archive of photographs from projects across the country that it shares on Flickr, as well as high-resolution photos of events. Flickr enables FHWA to upload photos from events quickly - sometimes within an hour after completion of an event, or in some cases during the event. With the capability for the public to download the photos, FHWA can direct members of the media looking for an image from a particular event to a Flickr download link instead of clogging their email inboxes with large image files or having to upload the images to a secure file-sharing site.

A Snapshot of 3 Years Later

As of April 2014 FHWA's Facebook and Twitter accounts have approximately 4,500 and 5,000 followers, respectively. FHWA's Facebook audience is quite diverse - 45- to 54-year-olds make up 44 percent of the audience, while 35- to 44-year-olds make up another 20 percent. Sixty-five percent of the audience is male; 35 percent is female. Followers mostly consist of engineering students and highway engineers. Outside of the United States, FHWA's top international followers are from Australia, Canada, India, Malaysia, Republic of the Philippines, Saudi Arabia, and the United Kingdom.

FHWA's YouTube channel has a total of 375 videos, with nearly 150 of them available to the public. Many of the videos are for internal use only - for specific target audiences such as training classes, meetings, and remote greetings. Among the public videos, FHWA's YouTube channel has had more than 82,000 unique video views and more than 450 subscribers who have signed up to receive notification when new videos are posted.

FHWA's Flickr page hosts more than 1,300 photos, most organized in sets based on event or project for easy browsing.

Most social media marketing specialists agree, however, that pure numbers do not always equate to successful messaging. The important thing is getting the right message to the right people at the right time.

Working with Partners

FHWA often works with the Office of the Secretary of Transportation and State and local DOTs to disseminate information that pertains to shared or similar audiences.

One example is National Work Zone Awareness Week, which traditionally occurs in April each year. National Work Zone Awareness Week promotes safety in work zones and asks motorists to slow down while traveling through them. To support the campaign in 2013, FHWA shared tweets, posts, and video clips from events held by the State DOTs in Iowa, Michigan, and Washington State to broaden awareness of these States' efforts. The U.S. Department of Transportation and the National Highway Traffic Safety Administration shared FHWA's tweets and Facebook posts on their accounts.

What the Future Holds

Currently, FHWA's Facebook, Flickr, Twitter, and YouTube accounts are the only social media tools sanctioned by the Office of the Secretary (OST). However, FHWA and OST are open to exploring other social media applications.

As the Internet and its myriad social media tools continue to grow, the agency and the department will continue to monitor trends and adopt new applications as appropriate to support their missions.

For more information, look for FHWA on Facebook, Flickr, Twitter, and YouTube or contact Tom White at 202–366–6522 or tom.white@dot.gov.
2015 Build a Better Mousetrap Competition

by Alanna Gerton, Technology Transfer Center

Build a Better Mousetrap’s purpose is to collect and disseminate real world examples of best practices, tips from the field, and assist in the transfer of technology. The competition is a fantastic way for innovative ideas to be exchanged with others that may benefit from different concepts and perspectives.

The NH LTAP is excited to bring the Build a Better Mousetrap Competition back to New Hampshire. This competition, which will make its return in 2015, is intended to get those creative juices flowing! Have you or any of your fellow crew members recently built an innovative gadget or developed an improved way to do a job? It can be anything from the development of tools, equipment modifications, and/or processes that increase safety, reduce cost, improve efficiency, or improve the quality of transportation.

We look forward to receiving your entries – best of luck to everyone!

**How is it judged?**

**Criteria:**
- Cost
- Savings/benefit to community
- Ingenuity
- Transferability to others
- Effectiveness

**Five point rating scale:**
1. Poor
2. Fair
3. Good
4. Very good
5. Excellent

Each criteria category will receive a score from 1 to 5. These numbers are then added together for an overall total. Based on these values, a judging committee will pick a New Hampshire winner, who is then automatically entered into the national competition.

**NH Competition Timeline**

**January 1, 2015:** Competition opens

**May 1, 2015:** Entry deadline

NH winners will be announced at the beginning of June. Everyone who submits an entry to the NH competition will have the opportunity to showcase their innovative ideas at the 10th Annual Ken Ward Memorial Plow Rally on September 16, 2015!

**How do I enter?**

Entries may be submitted either online or via mail. The online web form can be accessed at: 
[http://t2.unh.edu/build-better-mousetrap-competition-entry-form](http://t2.unh.edu/build-better-mousetrap-competition-entry-form)

If you choose to submit a hard copy, the form can be downloaded at: [http://t2.unh.edu/2015-build-better-mousetrap-competition](http://t2.unh.edu/2015-build-better-mousetrap-competition), and should be mailed to:

UNH Technology Transfer Center
33 Academic Way
Durham, NH 03824

**What should I be thinking about?**

The entry form is comprised of the following sections:
- Entry title
- Problem statement
- Discussion of solution
- Labor/equipment/materials used
- Cost
- Savings/benefits to the community

**Questions?**

Please contact the NH LTAP at t2.center@unh.edu, or at 603-862-2826.
2014 Build a Better Mousetrap Competition Winners

1st Place - Discharge Control Door: Kentucky

Problem Statement: When mowing right-of-ways, it is hard to control discharge from mowers. The city experienced several problems with discharge hitting cars.

Solution: Bowling Green Public Works fleet division developed a flap to replace the plastic chute that comes standard with the mower. The flap has three positions; fully closed (doesn’t allow any debris to be discharged), half open (allows debris to be discharged and directed down), or fully open (allows debris to be discharged freely).

Labor/Materials/Cost: $25

Savings/Benefits to the Community: The door provides a safer means of mowing rights-of-way. This cost efficient device reduces the company’s liability. The unit is easy to operate.

2nd Place - Truck Tire Changer/Roll Tube Bender: West Virginia

Problem Statement: We needed 1¼” pipe-roll formed to add the arch supports for our farmers market structure in Jawbone Park. The shop we had used in the past could not get it for several weeks, so we had to develop a method to bend the tubing.

Solution: We couldn’t just bend the tubing with a pipe bender. It would just kink and we could not keep it consistent. I was mounting truck tires one day and I thought this machine has all of the functions I need to form the tubing. It rotates and can create down force.

Labor/Materials/Cost: $100

Savings/Benefits to the Community: Immediate savings was about $1,200. It allowed us to complete a grant project on time. It provides a state of the art farmers market and has become a gathering place for the community with such events as Festival Fridays.

3rd Place - Pipe Puller: Colorado

Problem Statement: While installing a 24” diameter HDPE pipe, the gasket ends of the pipe were being damaged during the process of pushing the joints of pipe together with the bucket of the backhoe.

Solution: After trying various methods to push the pipe together without causing damage, it was decided to design and build a device to pull the two pieces of pipe together. The puller consists of a bar for leverage attached to a strap that fits down in the corrugations of the pipe with the chain and boomers attached to the other end. Then the bar is pulled back, pulling the two pieces of pipe together.

Labor/Materials/Cost:
- 6’ of 1” X ½” flat strap: $9.18
- 3’ of ¾” black iron pipes: $7.98
- 6’ of ½” chain: $23.94
- 2, 10” chain boomers: $17.99
- 2, 7/16” X 2½” bolt: $2.78
- 2, 7/16” lock nuts: $2.80
- Labor: $160
- Total: $225.67

Savings/Benefits to the Community: The 24” diameter pipe costs on average $480 per 20’ section and if the ends are damaged the pipe is useless as the pipe cannot be sealed. Time is saved on the job as the workers can safely put the pipe together while the operator continues to dig.
New Hampshire Public Works Mutual Aid

With the recent power outages and associated damage, as well as impending winter storms, the need for mutual aid is ever increasing. In times of crisis, a mutual aid agreement allows neighboring communities to provide assistance in the form of labor and equipment to help each other through the disaster. Mutual aid is a FEMA-approved contract and will make the assisting municipality eligible for federal reimbursement.

Mutual Aid is available for only $25 per year and the benefits are innumerable. For more information, visit the T² website at www.t2.unh.edu/ma or contact Amy Begnoche at 603-862-1362.

Minimum Retroreflectivity Compliance Kit

The Technology Transfer Center is now offering one Avery Dennison Minimum Retroreflectivity Compliance Kit on loan for New Hampshire Public Works Departments.

There is no fee for the equipment loan, and municipalities may keep the Retroreflectivity Compliance Kit for up to four weeks (additional time may be requested).

For more information

www.t2.unh.edu/retroreflectometer-loan-programs

www.twitter.com/nhltap

www.facebook.com/nhltap

Visit the UNH T² website today!

www.t2.unh.edu

• Access to the most up-to-date calendar
• Register for workshops online
• Access to NH Road Salt Database
• See important announcements
• Access to the UNH T² Facebook page

NH LTAP is on Facebook & Twitter!

Want to stay informed of our activities? Want to connect with other professionals who attend our training? Want to look at pictures from our training classes and other events? Then “like” us on Facebook or “follow” us on Twitter to stay connected! We are posting information daily on our activities, new programs, training, local news, and services.

www.facebook.com/nhltap
www.twitter.com/nhltap
Word Search

Be the first to complete this word search and send it to T² any of the following ways to win a FREE T² workshop!

Fax: 603-862-0620
Email: amy.begnoche@unh.edu
Mail: Technology Transfer Center
33 Academic Way
Durham, NH 03824

Words can be circled either upward, downward, backward, or diagonally.

Good luck!

Competition
Curb
Facebook
Media
Mousetrap

Noreaster
Pavement
Preservation
Ramp
Snowplow

Transition
Twitter
Wheelchair
Winter
Youtbe
Spring 2015 Training Calendar Dates to be Announced in February

Check out our website for the most up-to-date calendar
www.t2.unh.edu/training-calendar

This issue was edited by:
Alanna Gerton, Project Assistant, UNH T²