

# Road Business



The City of Dover was UNH T2's 2018 [Build a Better Mousetrap](#) winner for the state of New Hampshire, submitting their Media Box design. The Media Box was designed and installed in areas of the city where stormwater treatment was necessary, including to address new MS-4 permit requirements, but there was inadequate space for the construction of a rain garden. With both the Bellamy and Cocheco rivers running through Dover, and flowing into the sensitive Great Bay with both fresh and tidal water flow, finding innovative and sustainable ways to address stormwater was an important opportunity for Dover.



In partnership with UNH Stormwater Center, the City of Dover tried several new designs before re-engineering an old catch basin style structure into a new two-part system called a Media Box. One side or cell of the Media Box is a catch basin, used to collect sand and heavy debris. The other side or cell holds media intended to treat incoming storm water prior to the stormwater entering the drainage system.

Throughout the project, the City and project participants were challenged to rethink how stormwater had been viewed, discussed, and addressed in the past- including prior stormwater techniques such as creating a direct path to a river or brook, adding pipe or culverts to remove roadway ponding, and implementing full drainage projects that included many catch basins and large pipes directly to the river or brook. Instead, the project team focused on new stormwater thoughts and ways to develop new standards, such as to:

- Maintain Employee Involvement and Resident Involvement – collaboration leads to innovation, and great communication not only enhances relationships, but also collaboration. Understanding resident concerns early on in the project, including concerns with erosion, runoff, and preservation of trees, allowed the design team to think critically about each option and its ability to positively impact both the MS-4 Permit requirements and stormwater treatment, and also the residents. Throughout projects associated with Dover's Berry Brook Watershed Management plan, community outreach efforts included watershed and stormwater education activities at the Horne Street School; community meetings; homeowner workshops and stormwater audits; a residential rain garden installation; and a watershed clean-up.
- Catch Sediment and Trash – the design had to allow for effective and efficient collection of debris that would otherwise clog storm drains and potentially impact the system and environment.
- Capture and Treat Stormwater Close to Source – minimizing the distance stormwater had to travel to be treated results in an overall cleaner, more efficient system that results in improvements to the entire system- from media box through to the brook.
- Manage Impervious Pavement Area – preventing ground water runoff to maximize capture and treatment of stormwater.



*Media Box Filter with geotextile and pipe installation*



The benefit of the new media box is that it can be installed in the street fairly simply similar to a standard catch basin, as well as quickly over the course of 3-5 days. The cells are also easy to clean out, resulting in sustainable maintenance for the City of Dover. Additionally, the media box is an affordable treatment solution, at about \$3500 per box.

*See page 3 for additional pictures regarding the Media Box Installation Process*

*Interested in Build a Better Mousetrap? See page 8 or <https://t2.unh.edu/build-better-mousetrap>.*

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#### In This Issue

Stormwater Innovation - Dover's Media Box ~Cover	
Social Media for Small Communities	~ pg. 4
Upcoming Events	~ pg. 4
Supporting & Creating Local Innovation	~ pg. 5
Thinking About Drones?	~ pg. 7
Winter Salt Use- Why It Matters	~ pg. 8
Snowfighter Appreciation Day	~ pg. 9
EDC-4 Updates	~ pg. 11
Word Scramble	~ pg. 11

## From the T2 Team

### *Hello all!*

Our recent weather reminds me that New Hampshire is truly a four season state, although not all on schedule! We've recently seen sunshine, wind, rain, snow, ice, and looking at my yard today, mud season. Through it all, public works was called to action to clear trees, repair washed out roads, and address snow and ice removal. Be it holiday shopping, commuting to work and school, accessing medical appointments, or celebrating the holidays with friends and family, each of you has a part in making travel possible in New Hampshire, through your dedication to maintaining safe and effective roads. From all of us at UNH T2, thank you for your commitment and hard work!

We are wrapping up a busy 2018 workshop season, and already well underway in planning for 2019. This year saw almost 1500 attendees to over 100 workshops in 42 New Hampshire cities and towns! We attended industry conferences including with APWA, NLTAPA, ACEC, SIMA, and more. We're also pleased to have facilitated awareness of other partnerships and training opportunities that may benefit you- including NHPWA's Technical Meeting, NHPWMA's workshop, FHWA's EDC-5 initiatives, and AASHTO/FHWA's partnership to provide local road agencies free TC3 access to over 120 online courses!

Aside from these great resources, at UNH T2 we know that the most important responsibility we have to one another is ensuring we each get home safely, every day, to family and friends. To support that goal, we recently rolled out a Tailgate Talks library, where you can access dozens of ready-to-go safety topic discussions, designed to help you lead short safety meetings with your own teams on a routine basis- *keeping safety forefront of all we do, always.*

As we look to 2019, in addition to a suite of workshops throughout New Hampshire, we are excited to pursue new initiatives and opportunities, including e-commerce to allow you to register and pay for workshops online with a credit card, enhancing our Technical Assistance function through partnership with UNH Engineering faculty, and continuing to support remote learning capabilities to ensure every public works professional in New Hampshire has access to training and development opportunities.

To those of you who completed our 2018 User Survey- thank you- your feedback is invaluable to us in our planning. If you did not have the opportunity to respond, or have additional feedback to share, we'd love to hear from you. We're also interested in adding new topics, instructors, newsletter contributors, and resources to our program- so please reach out if you'd like to partner with us on any of those.

From all of us at UNH T2, we wish you and your families a very happy, safe, and memory-filled holiday season. We'll "see you back here" in 2019!

Best wishes,  
Marilee LaFond

#### New Hampshire Technology Transfer Center Sponsors





Other Steps in the Media Box Installation Process:



Replacement of backfill



Preparing for cover placement



Project completion



## Upcoming Events of Interest

We're taking a break from workshops for the winter, but watch for our 2019 workshop calendar in early February! Meanwhile- here are a few public works events to have on your calendar...

05/19-05/22/2019 – APWA Snow Conference – Salt Lake City, UT <https://snow.apwa.net/>

09/08-09/11/2019– APWA 2019 PWX Public Works Expo – Seattle, Washington <https://pwx.apwa.net/>

04/09/2019 – MassDOT Innovation Exchange

## Social Media for Small Communities

By: Alyssen Abel, P.E.

It is a struggle for communities to engage with their residents. Now, in the technology era, long gone are the days of face-to-face town hall meetings as they have been replaced with video chats and status updates on social media. Small communities are at the heart of this struggle because many do not have the staff resources available to dedicate to an effective communications and social media campaign. The communications and social media job functions are often combined with other job duties, further taxing their resources.

The City of Parkville, Mo., is a small suburb located 10 minutes northwest of Kansas City. Parkville serves a population of about 6,500 residents and understands the definition of “doing more with less.” Staff members throughout any organization wear many different hats to serve the needs of the community. In our case, the City Clerk also wears the hat of Public Information Officer.

**First things first:** There are several social media platforms available from Facebook to Instagram. Diversity in these platforms is always a good strategy to reach a greater audience. It is best to link all of the social media platforms with the city's website to promote consistency while hashtags help to organize the web content and provide interest by the readers.

**Don't put your eggs in one basket:** It is a good practice for small cities to assign one main point of contact for communications and social media. This will provide a uniform message to residents and prevent any miscommunications. With that being said, it is a good idea to have a staff member serve as backup, just in case the main contact is out of the office. Communications and social media training to those staff members will help provide consistency in the messaging.

**A picture is worth a thousand words:** On social media posts and web content, less is more. Be direct with as few words as possible to state your message and always include pictures. The pictures will help to describe the text and catch the reader's eye amidst all their other posts. There may be times that a long message is necessary, so consider truncated text or provide a hyperlink to allow the reader to get additional information.

**Stay relevant:** In the world of instant gratification, residents want (and sometimes need) the immediate updates. There is a fine line between too many posts and not enough information. It is a good practice to post at least three times per day per social media platform. This allows the messages to have a constant presence and keep the readers engaged.

**Keeping up with the Joneses:** It is good for the communications staff to monitor and follow other partnering organizations' websites and social media feeds. This allows for sharing of key information that would be helpful for your residents.

**Everyone is watching:** Be careful about posting information. It is a good practice to pretend that the information posted will end up on the front page of your small town newspaper. Everything produced by a public agency is a matter of public record and is discoverable under Missouri Sunshine Law. Although posts can be removed from a website, the electronic footprint remains forever. Develop a Social Media Policy and provide standards to the staff members charged with communication and social media.

**Get the community involved:** Provide opportunities to involve the community through social media. When the residents are involved, they take pride in the ownership of the final product. Organizations can easily engage the community by posting short surveys and online voting opportunities. One example that we implement in Parkville is to allow the residents to submit photos to the website for a photo contest; the photos can be used for distribution material or website photos in the future.

*Continued pg. 5*



The City of Parkville continues to find ways to engage the community. About two years ago, Parkville had a dead cottonwood tree in the middle of English Landing Park, an established 65-acre riverfront park. The standard response would have been to remove the tree down to the stump. Instead, staff members engaged the services of a local chainsaw carver, TJ Jenkins, to turn the dead tree into a piece of art. The City staff came up with three ideas for the tree carving that best represented the city: (1) an eagle; (2) a grizzly bear; and (3) a depiction of Lewis and Clark. The City hosted an online survey through the website for residents to vote for their favorite artwork and the majority of the votes received were for the eagle.

Once the nine-foot eagle was carved, the City hosted an online naming contest using the hashtag #NameThatEagle as an alternative means for collecting names. There were a total of 78 names submitted for consideration. A selection committee composed of City staff, elected officials and committee members narrowed the list of names down to five. The City hosted an online survey to vote for their favorite name. With 48% of the votes, the name selected was “Raji Ke. Pe Ke!” (meaning “You arrived here. It is good.” from the Otoe-Missouria tribe which had originally owned the land). The City hosted an unveiling ceremony for the eagle’s name. The person who provided the winning name is listed on the bronze plaque at the base of the eagle (a.k.a. Raj).

At the completion of the eagle carving, the artist (TJ Jenkins) gave the City a carved bear as token of his appreciation to staff for their assistance. Staff immediately fell in love with the bear and named the bear “Buddy Parker.” Staff started taking Buddy on field trips to job sites, groundbreakings, and ribbon cutting ceremonies. Buddy also is used in several of the public service announcements, whether it is encouraging residents to pick up dog waste, not to litter, or to wish them a happy holiday. The pictures are posted on the City’s Facebook and website along with the hashtag #BuddyParkerPKV. The City of Parkville struck social media gold with a piece of artfully carved wood.



“Buddy the Bear”

Small cities don’t need sophisticated computer programs or additional staff members to effectively communicate to their community. Following these basic guidelines for communications and social media will allow any organization to make an impact on their citizen engagement as well as the citizen’s quality of life. Having a mascot doesn’t hurt either.

*This article was originally printed in the APWA Reporter, February 2018 issue, and is gratefully reprinted here.*

## Supporting and Creating Local Innovation Opportunities

By: Marilee LaFond

In October, local and state DOT and transportation partners across the region gathered in Albany, NY for the FHWA EDC-5 Summit. I thoroughly enjoyed learning about the many opportunities to bring innovative techniques, materials, and processes to local road agencies in order to efficiently maintain our road infrastructure and promote safety. If you have not yet watched the EDC-5 webinars, I encourage you to do so here [https://www.fhwa.dot.gov/innovation/everydaycounts/edc\\_5/edc5-orientation-webinars.cfm](https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/edc5-orientation-webinars.cfm) to learn more about the ten initiatives discussed at the summit.

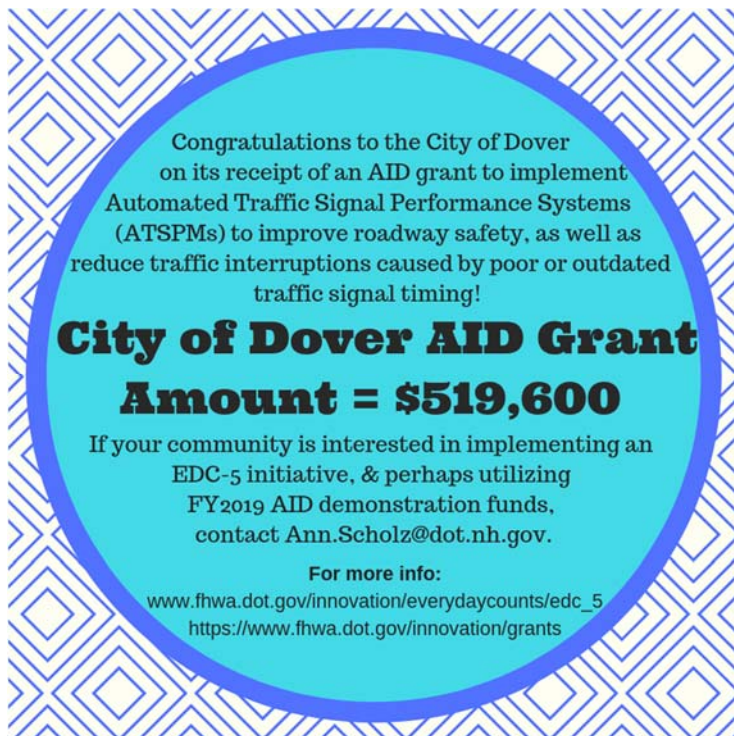
**The NH State Transportation Innovation Council (STIC)** will meet in early Winter to review the EDC-5 implementation plans submitted to FHWA. STIC is a partnership of public and private transportation industry stakeholders that work together to evaluate innovative products and practices and to lead their incorporation into the next generation of New Hampshire’s transportation network. The mission of the council is to provide input on the initiatives to be pursued, identify projects where techniques and technologies could be put to use in the operation and safety on our highway system, act as a catalyst for rapid deployment of nationally identified technologies, techniques, and tactics, and decide on applications for federal incentive and/or demonstration funding. The solicitation of STIC incentive funding opens at the beginning of the federal fiscal year (10/1) and closes at the end of the federal fiscal year (9/30).

### Eligible Projects/Activities:

The requirements for eligibility of a project or activity are as follows:

- The project must have a statewide impact in fostering a culture for innovation or in making an innovation a standard practice.
- The project/activity for which incentive funding is requested must align with TIDP goals.
- The project/activity must be eligible for Federal-aid assistance and adhere to applicable federal requirements.
- The proposed project/activity must be started as soon as practical (preferably within 6 months, but no later than 1 year) after notification of approval for STIC Incentive funding and the funds must be expended within 2 years.

*Continued pg. 6*



**Are you receiving PW.net listserv messages?**  
Public works professionals across NH, agencies, and UNH T2 use PW.net to collaborate, ask questions, & share info!

Contact [T2.Center@unh.edu](mailto:T2.Center@unh.edu) for sign-up details.

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*(Supporting and Creating Local Innovation Opportunities - continued from page 5)*

#### **Co-Chairs:**

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- Patrick Bauer, FHWA Division Administrator

#### **EDC Coordinator:**

- Yamilee Volcy, NH FHWA (603) 410-4842 [Yamilee.Volcy@dot.gov](mailto:Yamilee.Volcy@dot.gov)

For more details and information on the NH STIC council: <https://www.nh.gov/dot/programs/stic/index.htm>

For past NH STIC Incentive Projects: [https://www.fhwa.dot.gov/innovation/stic/incentive\\_project/#nh](https://www.fhwa.dot.gov/innovation/stic/incentive_project/#nh)

FHWA Office of Innovative Program Delivery <https://www.fhwa.dot.gov/innovativeprograms/>

**FHWA's Center for Innovative Finance Support(CIFS)**, a component of the Federal Highway Administration's Office of Innovative Program Delivery, provides resources, tools, and technical assistance to help agencies use alternative financing strategies to deliver projects under the Federal-Aid Highway Program. CIFS offers expertise on a variety of innovative finance options, including Grant Anticipation Revenue Vehicles (GARVEEs), State infrastructure banks, revenue tools, and public-private partnerships.

**FHWA's Accelerated Innovation Deployment (AID) Demonstration program** provides funding as an incentive—up to the full cost of the innovation in the project, to a maximum of \$1 million—for eligible entities to accelerate the implementation and adoption of innovation in highway transportation. [https://www.fhwa.dot.gov/innovation/grants/edc4\\_aiddemo\\_factsheet.pdf](https://www.fhwa.dot.gov/innovation/grants/edc4_aiddemo_factsheet.pdf) Projects funded, including in NH: <https://www.fhwa.dot.gov/innovation/grants/projects/#nh01>

**The Center for Accelerating Innovation** facilitates the rapid deployment of innovation into the transportation community based on the Every Day Counts (EDC) initiative. It also fosters and supports the State Transportation Innovation Councils' (STIC) national network, and innovation through the AID demonstration grant program, and shares the success of innovation at the national and local levels.

**The Center for Local Aid Support (CLAS)** provides national leadership in the advancement of training, technical assistance, and innovation within Local, Tribal, and Federal Land Management Agency transportation networks. The Center collaborates LTAP, TTAP, and CTIP partners, and aims to create a culture that has a real desire to look beyond "business as usual" and to use innovative tools and practices that already work and giving them a boost to increase efficiencies and adaptation, as well as deploy technology and foster innovation as a key FHWA business process with the Office of Federal Lands Highway (FLH).

You've likely noticed drones flying over an outdoor concert, beach, or similar public venue. For public works professionals, the possibilities for drones, or UAS (Unmanned Aircraft Systems) extends well beyond memorializing a fun event or estimating crowd size. At the recent NH Public Works Mutual Aid (NHPWMA) workshop, Douglas Brown, Sean Fichera, and Doug Rathburn from the Town of Derry's IT team shared how drones are increasing efficiency and safety across departments. For Derry and other local road agencies, this can include the inspection of bridges, dams, and roofs (safer and faster than ever before), site surveying, traffic control and counting, and search and rescue. Other uses include wastewater plant inspection, water tower inspections, and accident scene documentation and investigation. Drones can get higher, faster, as they do not require ladders, scaffolding, or safety apparatus. They can also maneuver easily around obstructions (adhering to the appropriate flight regulations). Other innovative and evolving opportunities are on the horizon for drones- UAS is an initiative in the FHWA Every Day Counts (EDC)-5, and several medical journals have published research looking at the opportunity for drones to fly in automated external defibrillators (AEDs) to deliver potentially lifesaving medical assistance quickly, for instance. If you've been thinking about adding a drone to your team's resources, here are some thoughts shared by the team from the town of Derry and others as you consider your options:

**Regulations:**

- Operators will need to have a Remote Pilot Certificate with small UAS rating under Part 107 of the FAA regulations. This certificate is valid for 2 years, and pilots will need to retest and complete the application and fee prior to expiration.
- Allowable flight times begin 30 minutes before sunrise and go until 30 minutes after sunset, or in twilight with appropriate anti-collision lighting. Minimum weather visibility is three miles. The maximum allowable altitude is 400 feet above the ground, higher if your drone remains within 400 feet of a structure. Maximum speed is 100 mph (87 knots). (From [https://www.faa.gov/news/fact\\_sheets/news\\_story.cfm?newsId=22615](https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=22615)).
- Drones must remain in line of the operator's unaided sight. Although this limits use in areas of trees, curves in the road, or other obstructions, drones are still helpful to see over small ponds, dams, or rooftops that would otherwise be challenging for the operator to access but still allow the operator to stay within sight of the drone.
- Drones cannot be flown directly overhead of people or occupied vehicles.
- May be possible to request a waiver for any restrictions, dependent in part upon ability to show an equal level of safety.
- Pilot in Command must make the drone available for FAA inspection or testing as requested, maintain required records, and report to the FAA any operation that causes serious injury, loss of consciousness or property damage of \$500 or more, within 10 days of the event.
- You must register each drone you operate if flying under Part 107.

**Technical Capabilities:**

- Flight time for most drones is about 25 minutes, but varies greatly.
- Thermal imaging cameras' effectiveness will be impacted by tree cover.
- Some models and regulations require that a drone's software and firmware be fully up-to-date before flying- be alert to the behavior of your model for this, and maintain the appropriate updates to avoid delayed or limited response time when the drone is needed urgently.
- Some models require a memory card for the drone as well as the thermal imaging camera or other attached units.

**Insurance and Costs:**

- Consider whether an insurance plan will replace the drone, repair the drone, and at what dollar amounts.
- In addition to standard insurance policies, there are apps on the market that provide insurance "on demand" based on a drone flight.
- The price range for drones varies widely, and may be \$3,000-\$8,00 (or more), or may be just a few hundred dollars, depending upon capabilities.
- Cameras can cost in the range from \$2,000-\$7,000.
- Tablets to operate the drone average \$400-\$900.

**Best Practices:**

- Have a documented process to ensure the right personnel have access to the drone quickly and when needed urgently.
- All licensed operators should practice flying at least monthly, to build and maintain confidence in flying the drone.
- Have a safety plan in place for all planned drone missions.

Many thanks to Douglas Brown, Sean Fichera, and Doug Rathburn and resources found at [https://www.faa.gov/news/fact\\_sheets/news\\_story.cfm?newsId=22615](https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=22615) as I wrote this article.



## Now Accepting Build a Better Mouse Trap Submissions Year Round!

**At UNH T2, we believe collaboration, innovation, and better efficiency and safety comes from sharing. That's why we want to make sure local and state road agencies have the opportunity to share their innovative ideas year-round.**

**While our Build a Better Mouse Trap contest will be officially held in early summer, we want to share nominations- and promote learning and innovation- all year.**



Have an Innovation Story to tell- a new tool, process, or technique saving your community or team time or money, or increasing safety?

Email [T2.Center@unh.edu](mailto:T2.Center@unh.edu), call 603.862.1362, or visit <https://t2.unh.edu/build-better-mousetrap>

## Winter Salt Use- and Why It Matters

By: Pierce Rigrod

Each winter across New Hampshire, over 225,000 tons of salt will be applied to keep our highways free of ice and snow. This does not include the tons of salt used by municipal, commercial, and private sectors to treat town roads, parking lots and sidewalks. Salt does not just dissolve and disappear. It finds its way into surface and groundwater affecting groundwater quality and aquatic life in rivers, lakes and wetlands. Striking a balance between public safety and environmental impact is difficult but necessary, particularly where sodium and chloride levels approach or exceed environmental standards.

Salt is expensive to remove once dissolved in water. While not a public health concern for most people, elevated sodium or chloride levels that reach or exceed 250 mg/L (a secondary maximum contaminant level (SMCL)), can result in a salty taste and be corrosive to home appliances. Treating water or replacing wells can be expensive. To reduce private well impacts, RSA 228:34 requires a 50-foot setback from the right-of-way of a state highway for newly constructed private wells. Setbacks, however, are not likely to be a panacea, particularly as sodium and chloride levels continue to increase over time.

Statewide surface water monitoring data suggests that sodium, chloride and conductivity levels are increasing over time. Most lakes continue to remain below the chronic chloride criterion of 230 mg/L but increases of over 100 percent in all three parameters noted above have been documented in many lakes over the past 25 to 30 years, with the greatest increases occurring in recent years. The same is true in groundwater. In 2011, US Geological Survey and NHDES reviewed sodium and chloride levels in public and private well water over a forty-year period. The upshot was that median sodium and chloride levels in groundwater (statewide) were three times higher by the end of the first decade (2000-2011) of this century than they were in the previous three decades. The largest increases have been in the southeast portion of the state.

Reductions in salt use of 20-25 percent are being realized in our state through the use of newer "on-truck" technologies, regular truck maintenance including seasonal spreader calibration to ensure more efficient salt applications, as well as pre-wetting with brine solutions to keep up to 30% of dry salt from blowing off asphalt surfaces. NHDOT, which currently uses brine solution on portions of I-93, and a number of local public works departments and commercial entities, continue to train staff to adopt practices that limit impacts of salt use on the environment. For example, NHDES Green SnowPro program trains salt applicators how to use the least amount of salt to ensure safe conditions on surfaces traveled by pedestrians and vehicles in winter conditions. Municipalities can also adopt low-salt policies for winter maintenance of state and local roadways and work with private property owners to limit excessive salt applications on private parking lots and driveways. To find out more about these options visit NHDES' Road Salt Reduction program by clicking on the "A to Z List" on [www.des.nh.gov](http://www.des.nh.gov), and then scroll down to "Road Salt."



Without a doubt, people are the most important resource in any winter maintenance program. You can have the best plows in the world, the most wonderful technology, all sorts of sensors and materials available to you, but if you neglect your front-line folk, who will be out taking care of things at 3:00 a.m. when the snow is falling thick and heavy, your program will not succeed in providing safe and sustainable snowfighting for the community that you serve.

Much of public works is thankless. When an agency is getting the job done, most of the public will forget about your very existence! It is only when things get interesting that people think about the workers in the public works agency, and often what they think is not too complimentary. So, when it comes to snow, people may be more inclined to think in terms of snow being plowed into their driveway and how hard that will be to shovel, rather than in terms of someone having been up all night doing a difficult job so that they (the public) could get to work safely in the morning.

The front-line public works operator is a little bit like electricity. Most of the time, you just assume the light will come on when you press the switch—so much so that you only notice when the light does not come on. Then it is time to complain!

How might we go about changing this rather negative perception of our key employees? Clearly, they deserve a much better sort of recognition than what will come their way if we are passive about this. So, we have to be active.



Cleanup efforts in Goffstown, NH following one of the recent November snow events. Picture credit to Meghan Theriault.

A time-honored approach is to hold some sort of day of appreciation for your front-line workers. Ideally, you would get your elected officials to pass a resolution (you know—one of those things with a whole bunch of “whereas” in them). You would let the media know you are going to have a special day, with equipment for people to look at and perhaps a couple of (short) speeches. And supply some coffee and donuts. It would help a bit more if there were some sort of theme you could build this around—perhaps you could stress how good winter maintenance allows commerce to thrive and have the event at a local mall. Or you could build the event around school safety and have the event at one of the local schools. There are lots of possibilities.

Of course, the challenge here is getting all of this organized and you are probably thinking in terms of how you have a pretty full plate already and this is going to add a bunch of things to that plate, and you are not sure quite how to do those things either. After all, when did you last write one of those “whereas” things?

Well, it need not be that hard. The Roadway Safety Foundation has created a website ([snowfighterday.com](http://snowfighterday.com)) that includes a draft resolution (all those “whereas” statements), examples of press releases, checklists that you can use when planning the event and a variety of other useful bits of information. In short, it is an online “Snowfighter Appreciation Day in a box” that you can use to put together an event that shows how much you value your front-line operators (although hopefully they know this already!) and more importantly, shares with the public the great work that those front-line folks are doing for them.

Most snowplow operators do not want continuous pats on the back—they are very happy to do their job well and know that by doing it they are helping to keep their community safe and moving. But just because they do not demand recognition, does not mean they do not deserve it. Consider giving them some of the recognition they most surely do deserve, by holding an appreciation day for them!

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## Want to be a contributor to UNH T2's Road Business newsletter?

Contact [marilee.lafond@unh.edu](mailto:marilee.lafond@unh.edu) to discuss your article or submission idea! We appreciate your input!



### Introducing the UNH T2 Tailgate Talks Library

UNH T2, and LTAP programs across the US, want to  
promote regular, routine safety dialogue in all teams.

We've compiled 35+ simple, brief training materials to  
guide a 10-15 minute safety training, with many more  
topics on the way.

Trenching Safety ~ Chainsaw Safety ~ High Visibility Safety Apparel ~ Electrical Safety ~ Heavy  
Equipment Safety ~ Winter Operations ~ to name a few topics!

Visit <https://t2.unh.edu/tailgate-talks> for tips on conducting a Tailgate Talk, as well as to  
download a topic and start the conversation!

## WORKING ON A ROAD PROJECT? PLEASE SHARE THE ROAD WITH OTHERS!

UNH T2 wants to facilitate knowledge transfer by bringing  
communities together to see one another's roadway projects-  
sharing project site expos to support learning & networking.

If you can host a few guests at your roadway worksite to show a  
technique, material, or other aspect of the project, please let us know!

Interested in visiting a worksite to see what towns are doing?  
We'll share opportunities as we become aware of them!

## WINTER WORD SCRAMBLE

tlivyibisi _ _ _ _ _	iavctopre _ _ _ _ _
inewgrpett _ _ _ _ _	eapresrd _ _ _ _ _
tnocabrilai _ _ _ _ _	ladeb _ _ _ _ _
arisInteo iucpbl _ _ _ _ _	snwo _ _ _ _ _
lbdrizaz _ _ _ _ _	biern _ _ _ _ _
ueqdaeet lpese _ _ _ _ _	lwpo _ _ _ _ _
ostuadcnliert _ _ _ _ _	eniegzfr _ _ _ _ _
renge posnrwo _ _ _ _ _	cfoeatrs _ _ _ _ _
tiolipacarp etar _ _ _ _ _	iec _ _ _ _ _
reareepttmu _ _ _ _ _	tsmro _ _ _ _ _
sftaye _ _ _ _ _	dwin _ _ _ _ _

Submit your completed puzzle to UNH T2 for a chance to win a FREE workshop seat (valued up to \$100)!

## EDC-4 Initiatives in Action!

If you have not had the opportunity to read the U.S.

Department of Transportation and Federal Highway Administration's EDC News Weekly Newsletter recently, there have been some outstanding summaries of Every Day Counts (EDC)-4 projects throughout the country. They recently focused on the pavement preservation (when, where, and how) initiative, through which state and municipal organizations are exploring pavement preservation treatments to address various roadway issues. Attendees at recent peer exchanges in Colorado, Connecticut, and Georgia discussed good practices for pavement management, such as the use of decision trees when selecting pavement preservation treatments. They shared resources such as OPTime tool (to consider the best time to apply preventive maintenance treatments), and the 2<sup>nd</sup> Strategic Highway Research Program R26 preservation analysis tool (to help in the selection of treatments). A peer exchange report is set to be released this fall and will include a pavement preservation benefits calculator tool.

Other projects states have embraced as part of EDC-4's Pavement Preservation initiative include Independence County, AR's attempt to address the rapidly declining condition of some roads due to major rainfall and temperature swings, along with heavy commercial traffic that caused distress such as severe cracking and oxidation. The cracks were too deep to utilize a single chip seal, and a mill-and-fill application, in which 1-2 inches of asphalt are milled and replaced with a new hot-mix layer, was too expensive an option to align with limited funding. The county landed on a chip seal and mass crack seal emulsion that would restore severely cracked, oxidized surfaces, using an "apply-and-scrub" method in which emulsion is sprayed and a mechanized scrub broom is then used to force the emulsion into cracks to fill voids. Aggregate is applied over the emulsion and compacted. A bonus to this method is that traffic can begin using the road in hours! Independence County used this technique on about 5 miles of roadway, *and saved tens of thousands of dollars over the traditional mill-and-fill method.*

The New Jersey Department of Transportation (NJDOT) is piloting several pavement preservation treatments, including two ultra-thin bonded wearing course projects, and using an ultra-thin paver on several high-performance thin overlay projects. The paver sprays a polymer-modified tack coat in front of the asphalt mixture, eliminating tracking issues associated with standard tack coat application and increasing bonding of the thin overlay to the pavement. This is expected to result in superior performance. They will monitor the piloted techniques' performance and develop specifications towards standard use.

To read the full FHWA EDC News Weekly Newsletters including on the initiatives, visit <https://www.fhwa.dot.gov/innovation/everydaycounts/edcnews/>

For information and technical assistance on pavement preservation, contact Jason Dietz of the FHWA Resource Center, Thomas Van of the FHWA Office of Infrastructure, or Antonio Nieves of the FHWA Office of Asset Management, Pavements, and Construction.



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Contact [T2.Center@unh.edu](mailto:T2.Center@unh.edu) to learn how you can earn free workshop seats with our hosting program!

*About UNH T2 and NHLTAP*

The UNH Technology Transfer Center fosters a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing knowledge of the transportation workforce and decision makers.

As the site of the state's Local Technical Assistance Program, it works to enable local counties, cities and towns to improve their roads and bridges by supplying them with a variety of training programs, an information clearinghouse, new and existing technology updates, personalized technical assistance, training videos and materials, and newsletters. LTAP Centers nationally are able to provide local road departments with workforce development services; resources to enhance safety and security; solutions to environmental, congestion, capacity and other issues.



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