

COUNTRY ROADS & CITY STREETS

VOL. 35 NO. 3 WEST VIRGINIA UNIVERSITY® BENJAMIN M. STATLER COLLEGE OF ENGINEERING AND MINERAL RESOURCES FALL/WINTER 2020

SAFETY TRAINING RESOURCES UNVEILED

Andrew Morgan, WV LTAP



WV LTAP has been focused on finding new ways to bring training and resources to roadway agencies across West Virginia, and we are excited to unveil a new service that we are calling **Safety Training Resources**. This series, developed by our partners at the Iowa LTAP, includes a wide range of resources on ten popular training topics, and it provides the resources an agency would need to establish a safety program on the topic and/or conduct training. On our webpage you will find the relevant safety standards, sample plans, and safety guides for your employees. Each topic also has a link to high-quality and current training videos and resources we have contracted from the Safety Soft learning platform.

Here is an example. If your agency wanted to host their own internal training on chainsaw safety, you could visit the page on our website to learn about the standards and best practices. You would also find information from OSHA on what should be in your first aid kit, a safety fact

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WV Local Technical Assistance Program

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WV Local Technical Assistance Program

SIGNS, BARRELS, CONES & MORE

2020 Work Zone Sign Packages

Kim Carr, WV LTAP

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The Work Zone Sign Package Program has been a staple of the WV LTAP since 1996. This program is so much more than the name implies, as each package includes various work zone safety devices, in addition to the signs. The goal of this program is to help West Virginia municipalities make their work zones safer for motorists and roadway workers.

While we are not able to offer this program annually, we were able to accept applications this year and award five of these packages. This year's recipients were: City of Cameron, Town of Farmington, City of Glen Dale, City of Pennsboro, and Town of West Liberty.

Each time we offer this program we are struck by the need our West Virginia municipalities have regarding work zone traffic control devices and the reality of limited budgets. "The five work zone sign packages that the WV LTAP awarded this year are especially important to West Virginia municipalities as their budgets have been negatively impacted by the COVID-19 pandemic. Both the devices and the training that goes along with the packages will enhance safety for motorists and workers and facilitate traffic flow in these communities," says WV LTAP director, Ron Eck.

The packages awarded this year have a value of nearly \$3,000 per package, but the increased safety they provide for the public works crews and motorists are invaluable. Each package included ten portable work zone signs, six sign stands, four barricades, four drums with reflective tape, 16 cones, two reflective "Stop/Slow" paddles, four Class III full-coverage safety vests, and two whistles with lanyards. In addition to the package, each municipality receives a free, work zone safety training course taught by one of our WV LTAP engineers, which will be offered virtually this time. In an effort to practice good COVID protocols, the municipalities were responsible for scheduling a date and time to pick up the work zone devices from the vendor located in Charleston and then transport them back to their agencies. All of us at the WV LTAP

missed meeting everyone in person, helping load the devices, and conducting training face-to-face.

While we received more applications than available packages, we are hoping to be able to offer this program again next year and award additional packages. One of the ways we will announce the program is through this newsletter. In the meantime, if your agency is interested in work zone training for your employees, or if you have a work zone question, please don't hesitate to contact us. We provide this training and technical assistance at no charge. We also have several resources on work zones available on our website at wvltap.org.



Pennsboro City Manager Mike Snodgrass (L) is shown here with Cameron Morrison picking up the Work Zone Sign Package equipment.



City of Cameron - Tim Reynolds (L) and Logan Kent (R)



Town of Farmington - Justin Kincaid



City of Glen Dale - Peter Grigsby (L) and David Cook (R)



City of Pennsboro Public Works, Left to Right - Dean McCullough, Adam Props, Ray Sutorius, and Dennis McCullough



Town of West Liberty - Arthur Simeth

COMMENT PERIOD OPEN FOR PROPOSED MUTCD CHANGES

The Manual on Uniform Traffic Control Devices (MUTCD for short) is the national standard for everything related to traffic control. It guides the rules public and private agencies must follow regarding signs, pavement markings, traffic signals, etc. The MUTCD was last updated in 2009, but the Federal Highway Administration has posted proposed changes for review. Check the Announcements section on WVLTAP.org to find a link to those proposed changes and to find out how you can comment. Comments are due by March 15, 2021.

2021 BUILD A BETTER MOUSETRAP COMPETITION

Celebrating Public Works Innovations

Have You Built a Better Mousetrap?

If there was ever a time where public works agencies tapped into their creativity, 2020 was it, and 2021 will probably need just as much innovative thinking. The Build a Better Mousetrap Competition is the perfect opportunity for public works agencies to highlight innovative solutions to everyday challenges that local transportation professionals encounter. Your entry can be anything from the development of tools or gadgets to equipment modifications to processes that enhance safety, reduce costs, improve efficiency, or improve the quality of transportation.

The purpose of this competition is to transfer technology through collecting and disseminating real world examples of best practices and tips from the field. So think about how something you do could help another agency.

Submit Your Entry

To enter the competition, complete the entry form at the WV LTAP website, wvltap.org/mousetrap If you would prefer to submit your entry by paper copy, please email kim.carr@mail.wvu.edu or call 304-293-9924. Competition deadline is May 10, 2021.

We encourage you to also include photos - or video clips - that showcase your project. A WV LTAP staff member is available to help with your write-up, should you want.

Examples

It may be helpful as you are thinking of a possible submission, to consider the following categories and examples. (The WV LTAP staff will decide which category to place your entry.)

Data Collection and Asset Management

Innovation in data collection processes, tools, or modeling/analysis that improves outcomes for an organization.

Sustainability

Innovation in the delivery of durable pavements, maintenance functions, and advances in safety, energy efficiency, and materials recycling.

Design and Construction Methods

Innovative design and construction strategies that can be replicated or serve as examples to advance the process of road construction.

New Tools, Applications or Equipment

Innovative solutions that enhance quality, improve efficiency, increase safety, or enable new construction techniques.

Judging

Entries will be judged by WV LTAP staff and representatives from the WV LTAP Advisory Board using the criteria of cost savings, benefits to the community and/or agency, ingenuity, transferability to others, and effectiveness. Winners will be recognized in this newsletter and receive a prize.

Winning entries from local agencies will be submitted into the National LTAP Build a Better Mousetrap Competition.

Criteria

The competition is judged on the criteria listed below within the framework of a five-point rating scale. The winner is the entry that has the highest number of overall points.

Judging Criteria

- Cost Savings
- Effectiveness
- Benefits to the Community
- Ingenuity
- Transferability to Others

Five-Point Rating Scale

5 = Excellent 4 = Very Good 3 = Good
2 = Fair 1 = Poor



ENTRY EXAMPLES FROM THE 2020 NATIONAL COMPETITION

In addition to the Build a Better Mousetrap Competition at the state level, the Federal Highway Administration Center for Local Aid Support also hosts a national competition. Below are a few of the 2020 entries. Visit <https://www.fhwa.dot.gov/clas/babm/> to see more of the innovative 2020 entries.

Black Top and Shoulder Stone Paver Solution for Problem Pavement Berks County, PA



Officials with the Lower Heidelberg Township in Berks County, Pennsylvania needed a solution to improve the daily commute of their residents.

Their issue

was uneven pavement after completing spot repairs or filling in shoulders using a hand shovel or rake. In addition to the uneven pavement, the manual repairs put road crews at risk for back injuries. The Black Top and Shoulder Stone Paver was the solution to safer driving conditions with minimal hand work required. The paver that the road crew developed allow asphalt mix to be unloaded and laid down in just 6 - 8 minutes compared to 35 minutes using a hand shovel or rake. The paver cost \$1,950 and allowed workers to set an even height for more level paving. Township officials say this proper patch repair was a huge cost-saver with the result being a smoother riding surface for drivers and a safer task for road crews.

Contact: Matt Clay, Road Foreman
Lower Heidelberg Township, Berks County, PA
484-256-3558 • mclay@lowerhbtwp.org

Portable Stop Signs Restore Safety Lyon County, KS



Missing stop signs is certainly a safety hazard for drivers in Lyon County, Kansas. When someone reports a stolen or damaged stop or yield sign, county highway department

employees are immediately called out to replace the sign no matter the time of day. Once workers are on the scene with an abundance of replacement materials and tools, they have to find the existing hole where the missing sign once stood

or remove the remainder of a broken pole and replace with a new sign. This process was time-consuming because of the time it took to gather the tools and equipment needed to replace the sign, which extended the time the intersection was left without safety signs. Highway workers wanted to find an easier solution to quickly replace the signs while restoring safety to the intersections. They found their solution in portable stop and yield signs. Going portable meant less time spent replacing signs. The portable signs have adjustable height legs with extensions that can be quickly installed in various terrains using less tools. Prior to the portable signs solution, workers would have to guess which tools would be needed to install the new signs. The signs are also easily transported in pickup trucks and SUVs. Lyon County officials say implementing use of the portable signs improved response times for temporarily replacing the signs and restoring safety at the intersections.

Contact: Jim Brull
Lyon County Highway Department, KS
620-340-8220 • jbrull@lyoncounty.org

Extra Eyes for Added Safety Ramapo, NY



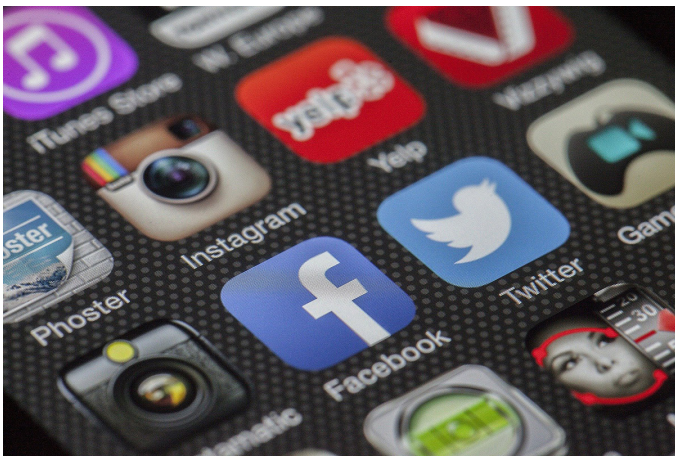
Snowplow operations in the town of Ramapo, New York have seen a decline in the use of wingman helpers, leaving plow drivers to finish the job alone. In an effort to increase safety and efficiency, the town purchased a 2-camera system that they installed on the plow equipment. One camera was mounted facing the wing so the driver can view the wing along

with what is in front of it. They also installed a camera in the rear of plow equipment to serve as a backup/salt spreader view camera. The solution to their safety problem cost the Town of Ramapo \$550 to retro-fit one truck.

Contact: Thomas DeMont
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WHY NOW IS THE PERFECT TIME TO ADD SOCIAL MEDIA TO YOUR COMMUNICATIONS TOOLKIT

Adam Howell, Communications Specialist, Cornell Local Roads Program & Marilee LaFond, Technology Transfer Center Manager, UNH Technology Transfer Center



Public works professionals are humble heroes. These extraordinary men and women act as first responders who arrive in the wake of car crashes and the fiercest storms, they are the PPE-clad guardians of roadway work zones, and they are the reason we have clean water flowing from our faucets. Behind all of these critical public works actions are stories to be told. To champion public works as a profession, build awareness of the industry, and advocate for resources, we need to find more ways to tell these stories and better connect public workers with the communities they serve.

To achieve this goal, we can turn to social media. Already, many public works agencies utilize social media to convey updates and announcements to their communities. Some are also finding social media platforms to be invaluable assets for sharing videos, photos, and commentary as a springboard to enhance relationships, build trust, and tell richer stories about the people working in this important field.

Social Media – I Haven't Used it Before so Why Now?

Following the outbreak of COVID-19 and the subsequent restrictions imposed by governments, businesses, and other institutions, people started using social media more than ever. There are many reasons why social media use has accelerated during the current crisis. For starters, there just isn't a lot for people confined to their homes to do. Isolation is also a reason for the increase in social media usage since the current crisis has forced people to remain socially distant. Finally, people have turned to social media in the wake of COVID-19 to gather

information. Even though social media usage is up, why should public works professionals be more inclined to use it? First of all, this is not just a crisis that simply changes our routines but rather this is a public health crisis, an economic crisis, and an unprecedented emergency that has created anxiety and fear in the minds of people everywhere. Now is a time when leadership and expertise are needed most and as we all know, public works professionals fit the bill. Public works agencies employ essential workers and first responders in our local communities. They work to make sure infrastructure stays intact during emergencies so that services like emergency response remain active. The current crisis has created an opportunity for trusted public works authorities to establish a lifeline of information with citizens through social media at a time when they need it most.

How are Local Agencies Using Social Media?

For the Keene, NH public works team, having a strong social media presence is a normal part of the department's communications strategy. Beyond sharing simple project updates, Keene Public Works and Emergency Management Director Kurt Blomquist sees social media as an important tool for humanizing his team members and the public works industry as a whole by putting a face to their work. By posting interesting job site photos or humorous videos, the Keene Public Works Department not only shares what they are doing but also who they are and what the industry is all about.

Keene's Public Works Department has enjoyed a lot of success by moving beyond words and using interesting visuals to tell a story. Their post of a one-minute clip showing a microscopic animal called a "water bear" garnered over 1,200 views in five months. When Aaron Costa, Operations Manager of the Wastewater and Drinking Water Treatment Plants, spotted the rare Tradigrade during his daily microscopic examination of the wastewater treatment plant's activated sludge, he turned it into a unique opportunity to share something rare while engaging viewers in science and public works at the same time. The local Waste Water Treatment Plant team also create videos for social media, such as their popular "Toilet Talk" series produced by Keene's Industrial Pretreatment Coordinator, Eric Swope.

While many public works departments use social media to engage their communities' creativity through entertaining

videos, and imaginative posts, many find social media to be a great platform for quickly and simply keeping the public informed of department activities. Jim Miller, Town of Ancram Highway Department Superintendent in Ancram, New York, doesn't consider himself a social media guru but has still found it to be a simple, effective tool for getting information out to his community. "We had a tropical storm that went through here and I had a couple roads closed for multiple days, so I put that on [Facebook]," Jim explains. "It really helps you spread the word a little bit better."

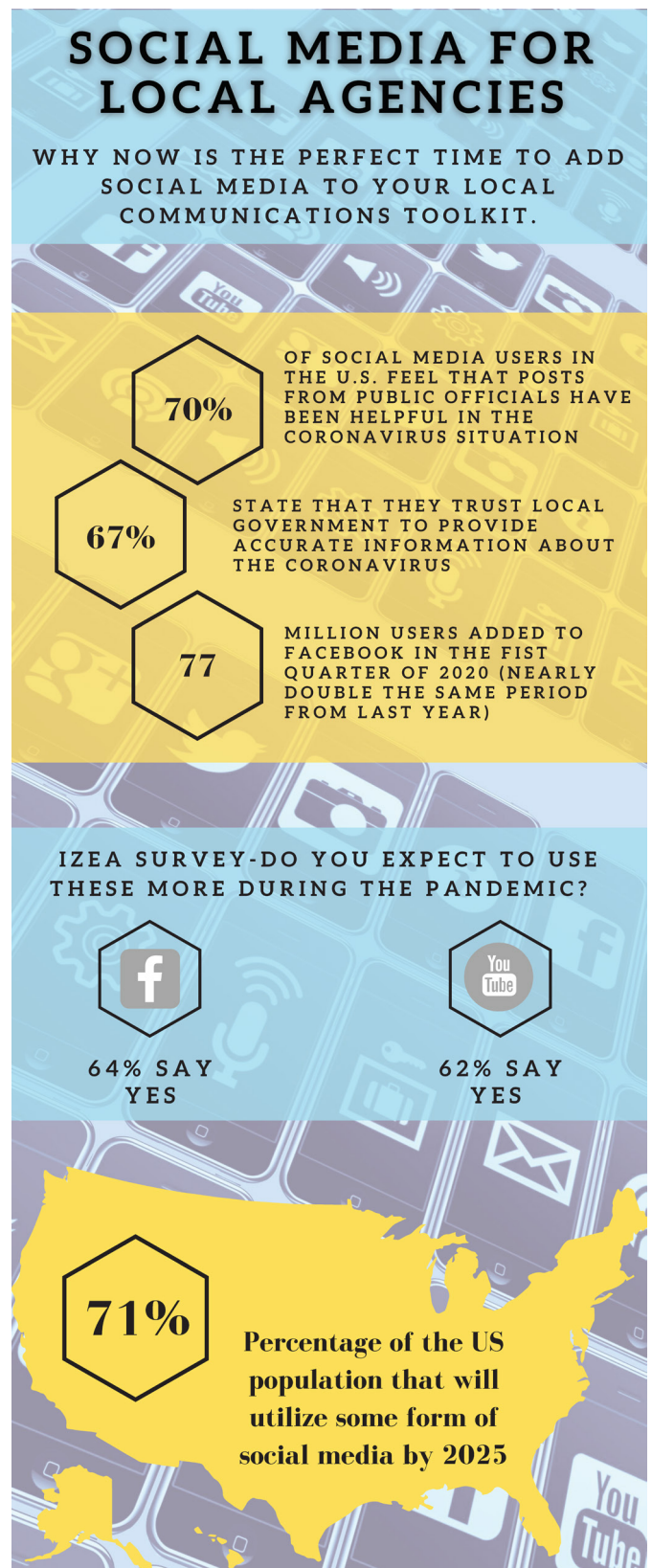
For those who choose to be more creative, there are free tools available. Vince Stetson, Superintendent of Street Services for the Town of South Windsor, CT, replaced their previous paid video editing platform with the free and easily accessible Apple iMovie software and is creating high-quality movie clips with features like visual effects and soundtracks quickly and efficiently. Once familiar with the program, a two-minute clip can be created in less than an hour. Vince's team has successfully utilized video to share project updates and engage with even the youngest members of their town like when they created a Public Works Week video after the COVID-19 outbreak shut down their annual Touch-a-Truck Event.

Best Practices for Using Social Media

When using social media, a picture can say a thousand words. Images are one of the best ways to get your social media post seen. Regardless of the message consider presenting it as a visual – even if you are posting an update or notice about a project. If you want to add a little style to your post, there are many quick design and publishing tools available, including free web-based programs like Canva for design or Pixabay for free images. A strong visual is what helped South Windsor, CT experience viral fame with its March 17th Facebook post showing a worker removing a clump of sanitizing wipes and paper towels from a clogged pump. The message included a request to please share the post to help spread awareness of the issue regarding the damage that flushing wipes can do to pipes and pumps. This simple photo and request to spread the word worked and the original post was shared almost 60,000 times while reaching over 3.2 million people. The post and message were also featured in several news media spots in subsequent days and weeks. Most importantly, the picture and message positively impacted people's behavior resulting in a drastic reduction of pump clogs.

A good visual can lead to positive, oftentimes unexpected results. One public works agency raised awareness of equipment funding needs by posting photos and videos of a plow truck broken down on the side of the road with an apology for the delay in finishing the route. When it came time to purchase a new plow the following year, the town passed the budget with minimal discussion.

South Windsor CT also uses photos to highlight the department's stewardship of taxpayer dollars and, in doing so, builds trust



with their community. An example of this includes the department posting a picture of a new library roof along with a note about the roof's 20-year non-prorated warranty. Another picture of a 100+ year bridge-culvert project highlighted the safety improvements, structure preservation, and tax-dollar savings that resulted from the project.

Overall, there are many creative and effective ways public works professionals can use social media. The important thing is to develop a plan, try things out, and be consistent. Focus on your goals and decide where you want a user's attention to go. For instance, social media posts are generally meant to be simple and appealing. Long-form text, regulatory information, or "fine print" is better left to other venues. Social media can be a great way to drive people to other, more authoritative sources of information such as a town or county website. Also, remember that social media is an investment. While we have all heard about the so-called "viral" post that gets millions of views, in reality, building a social media following takes time and consistency.

Finally, it is important to be aware that social media is well – social. This means that you must be prepared to deal with the two-way-street of receiving feedback from your constituents, including complaints, or even belligerent commentary. While dealing with conflict on social media can be distressing, don't let that scare you off. Having a plan, or even instituting a written policy will help you be prepared to address most situations. Don't forget – you control your social media channel. Belligerent, abusive, profane, or deceptive commentary can be moderated by you as the social media page administrator. A best practice is to post your comment policies on your social media page profile so there is no confusion about what you will and will not tolerate.

In recent months when we couldn't gather in person, "online" has been where our neighbors, friends, and family met up to share stories, shop, solicit help, and catch up on the news. Social media has made our living rooms, conference rooms, and public places accessible from a phone, tablet, or computer almost anywhere. Now's the time to make sure your local agency is a part of this community, sharing valuable updates, relevant and accurate information, and championing the public works industry through your team's story.

Resources:

UNH T2 Center LTAP Facebook Page

<https://www.facebook.com/UNHT2CenterLTAP>

Cornell Local Roads Program Facebook Page

<https://www.facebook.com/CornellLocalRoads>

City of Keene, NH Public Works Department "Water Bear" Facebook Video Post

<https://www.facebook.com/watch/?v=1452700674901409>

Town of South Windsor, CT Public Works Department Facebook Page

<https://www.facebook.com/swdpw/>

Town of Ancram, NY Highway Department Facebook Page

<https://www.facebook.com/Ancram-Highway-Department-505745032914128/>

safety training resources continued from page 1

sheet, a pocket card, a tailgate talk, etc. If you clicked the link titled Chainsaw Safety Training Videos and Resources, you would find not only a quality training video, but also a PowerPoint you could use for training and a test to verify your employees learned the key points. It is a complete training package.

WV LTAP is providing these resources at no charge to our WV public agencies, but we need your help to be able to continue offering these for free. **Each view of the videos incurs a cost for WV LTAP; however, the videos can also be watched in their entirety in "Preview" without any charge.** The "Preview" version is at a lower resolution and has a watermark, but it is adequate when evaluating a video. We ask that you use the "Preview" version anytime you are reviewing the video for content or determining its effectiveness. Then feel free to share the higher resolution version when showing to a group for training. Keeping these costs down will allow us to stretch our dollars and possibly add more topics as we move forward.

More information is available on our website at wvltap.org/safety. When you try this resource please let us know what you think.



ROADWAY MANAGEMENT CONFERENCE UPDATES

<https://roadwaymanagementc.wixsite.com/home>



The Mid-Atlantic LTAP Region hosted the 2020 Roadway Management Conference (RMC) virtually on October 27 and 28, with the Virginia LTAP taking the lead. This was the first time in the history of this conference that it was offered in a virtual format, which is true for many 2020 events.

We knew that budgets were tight for the public works agencies our LTAP centers serve, so we decided to offer this event free-of-charge. Several newcomers were able to attend this event for the first time and helped us reach nearly 300 registrants – the largest number of conference attendees to date. While we were not able to offer the typical demonstrations,

vendor area, and face-to-face interaction, we were still able to offer engaging sessions on a variety of topics.

Many of the presentations from this year's event are available on the RMC website. This website is also a great resource for up-to-date information on the 2021 conference, which is scheduled for October 6-8 in Rehoboth Beach, DE. The Mid-Atlantic Region is already beginning work on next year's event, and we hope to be in-person once again. If you have any suggestions for conference sessions or speakers, please don't hesitate to let us know.

Feedback from a few of this year's RMC attendees

- Two thumbs up to the VA LTAP team and the Mid-Atlantic Team for putting on a great conference. Where others have decided to skip their annual conferences, the RMC chose otherwise. Thanks for the effort and the seamless delivery of beneficial material to a wide variety of personnel. Stay Safe.
- Excellent conference.
- It was great!
- I find the RMC is a great value for me to get [my] PDHs for the State of Maryland. It's a great experience for all.
- Amazing conference. Cannot wait for next year.
- Thank you for your efforts and for the wonderful set up and preparations.

Save the Date!
2021 Roadway Management Conference!
October 6-8, 2021



October 6-8, 2021
Atlantic Sands Hotel & Conference Center
Rehoboth Beach, DE

DAILY WINTER CHECKLIST BEFORE YOU START YOUR DRIVE

Article reprinted with permission from moneygeek.com

Winter weather can present challenges for any driver. While many of you in our WVLTA audience are responsible for winter maintenance and operating trucks and plows, when you are off work, your winter driving doesn't just go away. Please review the following steps to winter driving safety and share this information with your family and friends. More information from the guide, "Safe Driving: Protecting You and Your Loved Ones on the Road This Winter" can be found on our website's home page, under Announcements.

1. Look at the weather

Winter weather can be unpredictable. You could leave for work in the sun with clear roads and be heading home on inches of fresh snow and ice. Before heading out, check the weather for the day so you can be prepared for whatever winter conditions are coming. If you'll be driving in the snow, make sure you know how to access your vehicle's winter driving mode or have chains ready in your car.

2. Check your driving route

You can keep yourself and others safe by planning your route before you leave. Using services like Google or Apple Maps can help you prepare for any slowdowns in traffic, accidents, or road closures due to winter conditions.

3. Stock your vehicle

There are a variety of tools and supplies that can help you stay safe while driving in winter. Depending on the severity of the weather you face, consider keeping the following in your car:

Snow Shovel	Ice Scraper	Sand or Kitty Litter	Jumper Cables
Flashlight	Flares	Blankets	Gloves

4. Clear the exhaust pipe

Perhaps the most important thing you can do in winter before starting your vehicle is to make sure that your exhaust pipe stays clear of snow or ice at all times. If your pipe gets clogged and backed up, carbon monoxide gas will leak into your vehicle, which may cause serious health issues or death.

5. Remove snow and ice from windows

Visibility is crucial in winter conditions. Using an ice scraper, thoroughly remove all snow and ice from your windshield and additional windows. Don't forget about your side-view mirrors and even your backseat and cargo windows, as you'll need them to check for cars in your blind spot.

6. Check your roof

If you have driven behind a vehicle with a foot of snow piled on its roof, then you have an idea of [how] the constant stream of snow flurries blowing off a car's roof can directly obstruct your view of the road. Using a snow scraper or broom to brush off the top of your vehicle is a courtesy to help other drivers stay safe on the road.

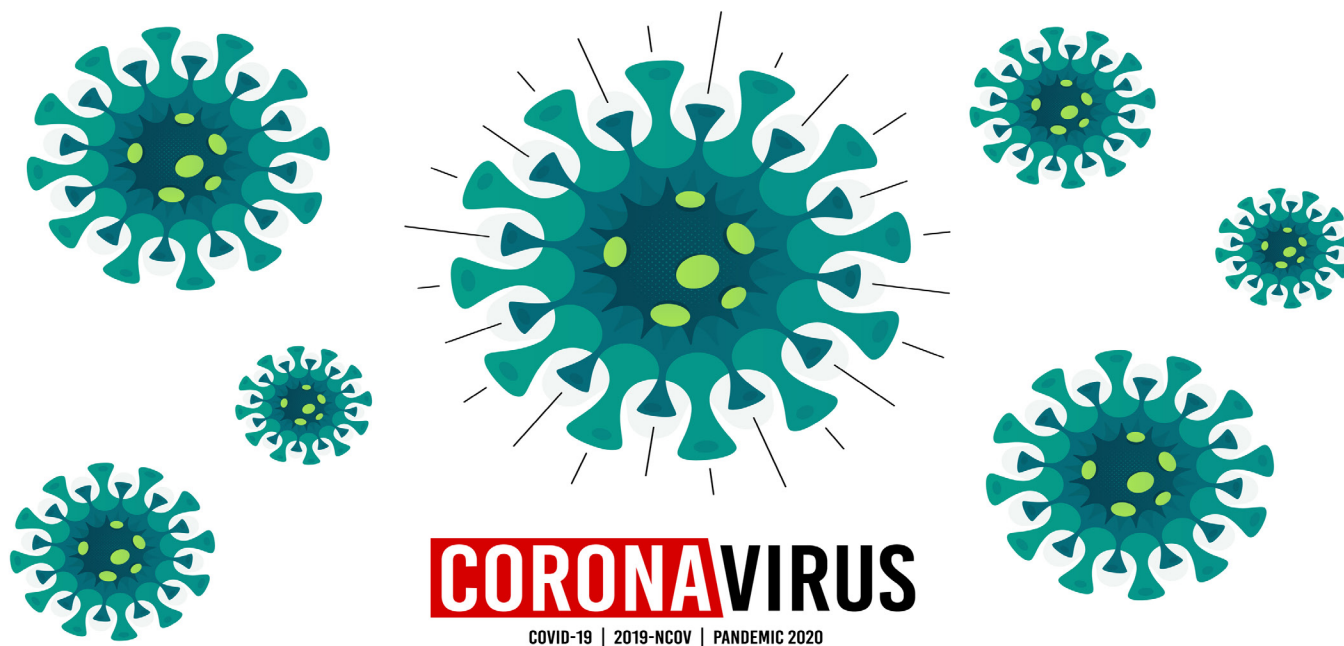
7. Clear cameras of debris and snow

In 2018, Congress made it a law that all new vehicles had to have a back-up camera installed. Cameras enhance rear-view visibility. Before backing out of your garage, driveway, or parking spot, make sure your cameras are free of debris and snow. This might require you to use a wet towel to remove built-up dirt that has splashed on your camera from driving on wet roads.



TRANSPORTATION PANDEMIC PLAYBOOK SUMMARY

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[The] ***Transportation Pandemic Playbook*** is a practical guide for managing a transportation agency's response to a pandemic, concentrating on WHAT needs to be done, WHEN, and by WHOM.

For those agencies starting or revising their pandemic plan, **Part 1** of the Playbook provides an overview of the characteristics of pandemics and their differences from other hazards, gives optional approaches to developing plans and programs, and identifies key questions to ask and decisions to make. It delineates the other organizations agencies are likely to encounter during a pandemic and approaches for working together.

Part 2 articulates the challenges agencies and their leaders are likely to experience during a pandemic:

- Lack of confidence by the traveling public
- Morale and trust issues with employees
- Possible loss of team bonds among staff
- Stress and psychological considerations for staff, families, and community members
- Increased expenses and reduced income
- Unintended consequences of response actions

For those agencies in the midst of a pandemic, [the Playbook **Part 3** provides plays] for agencies and their leaders to consider, based on domestic/international research and interviews with key transportation leaders, from organizations large and small, throughout the United States during the COVID-19 pandemic. The resourcefulness and innovation demonstrated as agencies rose to serve their communities during an unprecedented crisis was amazing and inspiring. Many of these innovations are highlighted as "Exceptional Ideas" within the individual Plays. The Playbook concludes with challenges in **Part 4**.

As the Playbook was being written (September 2020), there was no end in sight for the COVID-19 pandemic. Organizations now must sustain operations into the foreseeable future and continue to both adapt to present conditions and create longer term plans. The Playbook includes a Play for Sustained Operations.

ESSENTIALS/KEY POINTS

- A pandemic emergency response is different for transportation agencies compared with other events in terms of timeline (extended and indeterminate rather than finite), impacts (no infrastructure impacts, but profound employee, community, and economic impacts), and transportation agency roles (support for health and other agencies).
- Have the right people in place for a pandemic including an Industrial Hygienist or other medical professional to provide guidance and credibility to the agency mitigation and response efforts.
- DOTs and transit agencies may have to adjust their working relationships and employee policies—from how work crews can travel together to a work site, to how transit operators interact with passengers, to closing facilities and enabling wide-scale work-from-home policies, to how transportation emergency managers interact with their counterparts within the agency and in the state emergency operations center (EOC).
- Don't be a vector for the pandemic. Protect your employees and the traveling public. Review all areas on the system such as roadside rest areas, vista points, and employee or public gathering places, that may be transmission points.
- The extended, indeterminate timeline can lead to employee burnout and public complacency and non-compliance with protective measures. The extended timeline also complicates response to “normal” disasters such as hurricanes, wildfires, heat events, tornadoes, flooding, blizzards, and so on.
- DOTs and transit agencies may engage in non-traditional but important support roles, such as providing essential equipment, food, and prescription deliveries; logistics support; screening passengers and highway visitors; traffic management for mass testing sites; and even contact tracing and helping with unemployment claims.
- COVID-19 has had proportionately much greater adverse impacts on traditionally underserved populations and people of color than on traditionally privileged communities. Agencies generate and influence social and environmental justice impacts and unintended consequences, positive and negative, through their actions and inactions in pandemic response.
- Pandemics emphasize an agency's need to balance safety with service, a challenge transportation agencies wrestle with every day. Major challenges experienced during COVID-19 provide kernels of opportunity to emerge stronger, more resilient, more compassionate, and more connected as agencies and as individuals.
- Potential silver linings include the ability to advance projects, pursue mainstream innovations, and establish more wide-scale and regular employee interactions.

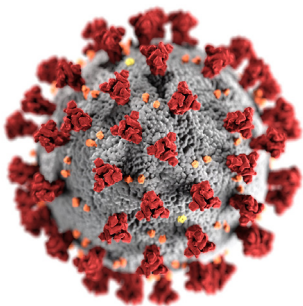
TO READ THE COMPLETE MANUAL ONLINE OR DOWNLOAD A FREE PDF

<https://www.nap.edu/catalog/25993/a-pandemic-playbook-for-transportation-agencies>
or <https://www.wvltap.org/covid19>

REFERENCE

National Academies of Sciences, Engineering, and Medicine. 2020. A Pandemic Playbook for Transportation Agencies.
<https://doi.org/10.17226/25993>

COVID-19 RESOURCES FROM OSHA



Fed OSHA published a **COVID-19 Resources** publication on December 1, 2020. This publication is intended to be a guide for employers seeking to achieve compliance with the evolving OSHA Covid workplace requirements. The document includes COVID-19 resources grouped by agency and additional industry-specific COVID-19 resources, including the construction industry.

We wanted to make you aware of this new resource as we all continue to struggle with the virus and its consequential effects. The OSHA COVID-19 Resources can be found on our the WV LTAP website at <https://www.wvltap.org/covid19> or at <https://www.osha.gov/SLTC/covid-19/>.

VIRTUAL SNOW & ICE CONTROL WORKSHOP



The 2020 Snow & Ice Control Workshop was the 29th year of this event, held on September 29. Although we had to adapt the workshop to a virtual format, we still had a variety of presenters, topics, and attendees. We kept the sessions concise and none were more than 45 minutes in length.

One of the advantages with this virtual format was it afforded us the opportunity to bring in multiple presenters from other states, such as our colleagues from Delaware and Iowa. We also offered this year's workshop at no charge and this allowed a few of our municipal agencies to have their entire crew participate. While we didn't break any attendance numbers this year, we were excited to have 104 attendees.

Matt Carter, an engineer with the Delaware LTAP, spoke on the topic of winter maintenance planning and the relationship between winter maintenance and stormwater. With COVID impacting how road crews are currently doing their jobs and how this will impact winter operations, we were excited to have a session on COVID precautions and winter maintenance. Jake Bumgarner, WVDOH Operations Division Director and Jeremy Casto, WVDOH COVID Task Force Chair kicked off the session, which was presented by Shane Hudnall, the WVDOH State Safety Officer. Jerry Arnold, City of Buckhannon Public Works Director, spoke from a local agency perspective on the COVID-19 operational and safety measures they had in place.

Safe Driving for Plow Operators is another important topic that was presented by Andrew Morgan, Program Coordinator for the WV LTAP. Snow plowing isn't for the faint of heart, and a skilled driver makes all the difference. Paul Albritton, the Technical Training Coordinator from the Iowa LTAP, spoke to the participants about salt use and equipment calibration, both topics that are important and impact areas such as environmental, operational, and financial.

Understanding how to conduct proper equipment inspections is another vital skill for winter maintenance crews. Aaron Stroud, Acting Manager for the WVDOH Equipment Operator Training Academy, conducted this presentation. The workshop concluded with a session on effective communication and a brief overview of the WV LTAP's website given by Kim Carr, Program Coordinator for the WV LTAP.

If you were not able to attend this year, or if you want a refresher, you can access copies of this year's presentations from the WV LTAP website at wvltap.org/snow-and-ice-presentations.

TIPS FOR PLOWING SNOW ON GRAVEL ROADS

Steve Seeds, P.E. and NVLTAP Program Director and Greg Duncan, P.E.
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Photo of a gravel road made more susceptible to moisture damage by gravel being snow plowed into the ditches.

There are three key reasons for applying gravel to a natural soil (earthen) road. **The most important reason is to create a structural layer (or crust) that can help distribute wheel loads over a larger area (and reduce the rate at which ruts and potholes develop).** The second reason is to improve surface drainage so that water from precipitation does not pond and create soft spots, potholes, and/or “mud pits.” The third reason for applying gravel is to provide a relatively maintainable layer that can survive the expected levels of traffic for several years.

Like most roads, gravel roads must be plowed after a storm that drops several inches of snow. In fact, fighting the urge to plow immediately when the first snowflake falls is a wise choice for gravel

road maintenance. The goal of the snow plow operation is to remove most of the snow without damaging the gravel crust. There is a natural tendency on the part of some operators to scrape the gravel surface to help improve the smoothness of the road or to remove all of the snow. The problem with this approach is that it can puncture the surface crust, expose the natural soil, and create areas where water can infiltrate and saturate the soil and allow soft spots and potholes to develop. The surface gravel is moved to the ditch with the discarded snow, along with any dust palliative blended into the surface.

The best practice for snow plowing on gravel roads is to set the skids on the snow plow blade at a height that prevents the blade from contacting the gravel surface and to dial back the vertical (attack) angle of the plow blade from the usual 55 degrees to a less aggressive 45 degrees. The result of these practices will be a thin layer of snow left on the road surface, but the integrity of the gravel crust will be maintained.

If there are any problems with poor cross slope and/or road roughness, they should be addressed during spring maintenance using a grader and standard gravel road regrading practices.

Interested in additional information regarding gravel road maintenance? Check out the Document Library, Training Videos, and links to Self-Paced Training located on our website.

wvltap.org

Remember: There are three key reasons for applying gravel to a natural soil (earthen) road.

1. Create a structural layer (or crust) that can help distribute wheel loads over a larger area (and reduce the rate at which ruts and potholes develop).
2. Improve surface drainage so that water from precipitation does not pond and create soft spots, potholes, and/or “mud pits.”
3. Provide a relatively maintainable layer that can survive the expected levels of traffic for several years.

SAFETY BRIEF

Operator Safety During Winter Maintenance

Snow removal and winter maintenance season are always challenging for employees involved in keeping roads and streets maintained during inclement weather. It's especially challenging this season as we continue to deal with rising COVID-19 numbers that are impacting our entire state. These safety tips were taken from a tailgate talk on operator safety developed by NLTAPA and from the safety precautions during winter operations presentation given at the Snow & Ice Control Workshop. Please stay safe and healthy as you navigate this season.

- Use your seatbelt at all times.
- Be well rested, avoid taking medications that make you drowsy, and never drive while impaired by alcohol or drugs.
- Dedicate your full attention to driving and do not become complacent.
- Continually search the roadway or job site to be alert for situations requiring quick action.
- Never drive faster than road conditions permit, or faster than the posted speed limit. Follow your agency's rules on driving speed when performing snow and ice control duties.
- Drive defensively and be aware of traffic behind you.
- Always be sure your truck/equipment is in safe condition and keep windows, mirrors, lights, and vehicle signage clean.
- Wear all required personal protective equipment (PPE).
- Observe all traffic laws and signal your intentions clearly.
- No matter how difficult, do not take other driver's actions personally. Keep your temper under control and be patient.
- Watch for snow-covered obstacles and children playing in snow banks.
- Do not cross road or street centerlines.
- On bridges, watch for ice and expansion joints. Do not form a wall or ramp along the bridge railings.



Some COVID-19 Specific Safety Tips

- Get plenty of rest when you're not fighting snow.
- Don't go to work sick. Report any fever, unusual cough, etc. to your supervisor.
- Wear a mask when distancing can't be maintained, especially when in equipment with others.
- Always have disinfecting wipes and hand sanitizer available.
- Wipe down your equipment before and after shift change.
- Try to minimize riding in tandem or sharing equipment, i.e. loaders
- Have a contingency plan in place, in case a crew, or whole organization, is on quarantine.
- Have maps, emergency phone numbers, and location of supplies and equipment in the cabs of trucks.
- Have a back up to your back up.

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Country Roads & City Streets is published three to four times per year. The purpose of this newsletter is to provide information that is beneficial to decision makers, elected officials, and roadway construction, maintenance, and management personnel.

The material and opinions included in this newsletter are those of the West Virginia LTAP and do not necessarily reflect the views of FHWA or the WVDOT. Every effort has been made to ensure the integrity and accuracy of both original and borrowed material. However, the West Virginia LTAP does not assume responsibility for any information that is found to be incorrect.

THE MISSION

The mission of the West Virginia LTAP is to foster a safe and efficient transportation system which enhances the economic development of West Virginia by improving skills and increasing knowledge of the transportation workforce and decision makers.

To help achieve this mission, training, demonstrations, technical assistance, and resource materials are provided.



The WV LTAP staff is working on our training calendar for the first part of next year. Currently, our plan is to continue offering our training virtually through at least spring. We miss delivering in-person training, but we want to make sure it's as safe as possible for our instructors and class participants when we return to the in-person

format. We will continue to promote other training opportunities from our partners as appropriate so that those of you who are working on becoming RS I and RS II graduates can continue to make progress.

Please visit our website and watch your emails for our electronic announcements, such as *Road & Street Speak* and our special *Updates* editions. If you need to update your information or sign-up to receive information, please email Kim at kim.carr@mail.wvu.edu, or complete our online form, <https://www.wvltap.org/newletter-sign-up>. Finally, please reach out to us with any questions or training topic suggestions. We welcome your feedback!