

MISSOURI LTAP

MISSOURI LOCAL TECHNICAL ASSISTANCE PROGRAM
LOCATED AT MISSOURI S&T

THIRD QUARTER 2020

6 OUR WORLD TURNED UPSIDE DOWN:
PUBLIC WORKS DURING COVID-19

10 SUMMERTIME, AND THE PLOWIN' IS EASY

12 TRAINING IN THE TIME OF COVID-19



Missouri LTAP Staff

Heath A. Pickerill, Ph.D.
Director

Kristi Barr
Program Coordinator

Doreen Harkins
Administrative Assistant

Gidget Koestner
Safety Circuit Rider

Shelby O'Keefe
Contract Graphic Designer

Missouri LTAP Advisory Committee Members

Larry Benz — Director, Cole County Public Works & MACTO representative

Patrick Bonnot — Loss Control & Member Services Director, MIRMA

Batina Dodge — County Clerk, Scotland County

Mike Geisel — City Administrator, City of Chesterfield & APWA representative

Tracy Graham — Associate Commissioner; Audrain County, CCAM rep

Jen Harper — Research Administrator, Construction and Materials, MoDOT

Dan Hausman — County Council Member, University of Missouri Extension

Stuart Haynes — Policy & Membership Associate, Missouri Municipal League

Dan Jessen — Street Operations Supervisor, City of Springfield Public Works

Bruce McGregor — Director of Public Works, City of Olivette & APWA representative

Sean McGonigle — Risk Manager, Missouri Association of Counties

John P. Miller — Safety Engineer, FHWA Missouri Division

Dawn Perkins — Transportation Engineer, FHWA Missouri Division

Bonnie Prigge — Executive Director, Meramec Regional Planning Commission & MACOG representative

Dan Ross — Executive Director, Missouri Municipal League

James Stevenson — Program Implementation Team Leader; FHWA Missouri Division

Julie Stotlemeyer — Local Programs Administrator, MoDOT

The Fine Print

Missouri LTAP Quarterly is published by the Missouri LTAP office located on the campus of Missouri University of Science and Technology. The opinions, findings and recommendations expressed in this newsletter are not necessarily those of Missouri S&T, MoDOT or the Federal Highway Administration.

Publication Information
Printing — Missouri University of Science and Technology Printing Services

FROM THE *DIRECTOR*



Hello everyone!

Our MO-LTAP team is settling into the fall semester at Missouri S&T. The past few weeks have been a transition having students back on campus. We have missed the energy the students bring. Campus was a ghost town for so long that it is refreshing to have activity on campus again. Granted, classes, meetings, and various other events have been modified to ensure the safety of students, faculty, and staff, but it has been nice returning to a slightly more normal routine.

Even though campus activity has resumed to some degree, it has been an adjustment not attending in-person conferences throughout the fall. This time of year is usually hectic as I travel throughout the state to various events; however, most conferences have transitioned to a virtual format or been cancelled. The Missouri Association of County Transportation Officials (MACTO) Conference is moving forward with their event at the Hilton Convention Center in Branson on October 6-7. Because of travel restrictions on the Missouri S&T campus, I will be unable to attend the conference this year. I am saddened to not attend and be able to appreciate firsthand all of the hard work by the planning committee and MACTO board to hold an in-person event. I realize how much effort they have extended to ensure a safe, enjoyable, and informative conference. I am pleased that Ms. Gidget Koestner, Safety Circuit Rider, will be attending and giving an overview of the Safety Circuit Rider Program during the open session as well as operating the MO-LTAP booth in the exhibit hall. I appreciate Gidget's willingness to assume these responsibilities.

The MO-LTAP team will be offering three options for training. First, we will continue to promote web-based classes hosted by various organizations such as FHWA, AASHTO, APWA, and TC3. Please check our calendar at moltap.org for a list of upcoming online trainings. Second, we will host "special topics" webinars. These virtual workshops will be scheduled through Zoom and limited to about one to two hours. We have 3 sequential sessions on LPA Basics – Responsible Person in Charge scheduled on October 14, 21, and 28. Each sessions will be from 11 a.m. – 12:30 p.m. Other possible topics include guardrail maintenance, signing, pavement preservation, asphalt basics, concrete overlays, and ADA transition planning. We welcome suggestions for these workshops as well. Third, we will offer in-person trainings on a limited basis to single agencies upon request. Under the current pandemic, we feel it is best to avoid scheduling classes where multiple agencies attend. We will follow all CDC guidelines by limiting the class size, adhering to social distancing, providing proper personal protective equipment such as facemasks and gloves, along with using any necessary sanitizers and disinfectants. Agencies will need a facility large enough to ensure 6 feet minimum social distancing. I am pleased to report that we have hosted a few in-person classes throughout the summer and early fall months that went very well and are coordinating with a handful of agencies for fall classes.

As the MO-LTAP team looks beyond 2020, we are planning strategically for the next few years. The current situation surrounding COVID-19 has prompted a close examination of how we deliver training and resources to local public agencies. We are committed to developing projects that match the evolving obligations of local public agencies while meeting their training needs through a diversified approach.

Kind regards,

Heath A. Pickerill, Ph.D.
Director, Missouri LTAP

In this ISSUE

THIRD QUARTER 2020



PLACES TO GO: PAINTED ROCK CONSERVATION AREA

Painted Rock Conservation Area is located on Highway 133, seven miles west of Westphalia in Osage County.



LOCAL ROAD SAFETY PLANS – A TOOL FOR INCREASING SAFETY ON MISSOURI'S LOCAL ROADWAYS

Knowing the condition of your local system and identifying the needs and potential solutions demonstrates good stewardship.



OUR WORLD TURNED UPSIDE DOWN: PUBLIC WORKS DURING COVID-19

During the time of the COVID-19 shelter-in-place, the role of public works professionals as first responders has become clear to a growing number of Americans.



COLLABORATIVE HYDRAULICS: ADVANCING TO THE NEXT GENERATION OF ENGINEERING (CHANGE)

Next-generation hydraulic tools improve the understanding of complex interactions between river or coastal environments and transportation assets, enabling better design and enhanced communication.



SUMMERTIME, AND THE PLOWIN' IS EASY

While it is absolutely true that plowing snow is a relatively trivial task in the summer months, it is not the case that this is a time for winter maintenance folk to simply kick back and relax, without a winter-related care in the world.



TRAINING IN THE TIME OF COVID-19

The COVID-19 pandemic has resulted in (among other things) the cancellation of many meetings at both a national and chapter level, which has significantly reduced the opportunities for training that we have available for us and our workforce.

FOLLOW US ON
SOCIAL MEDIA!



Missouri LTAP | @LTAPMO



Missouri LTAP | @Missouri LTAP

The Local Technical Assistance Program (LTAP) and Tribal Technical Assistance Program (TTAP) are composed of a network of 58 Centers — one in every state, Puerto Rico and regional Centers serving tribal governments. The LTAP/TTAP Centers enable local counties, parishes, townships, 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 and newsletters. Through these core services, Centers provide access to training and information that may not have otherwise been accessible. Centers 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; technical publications; and training videos and materials.

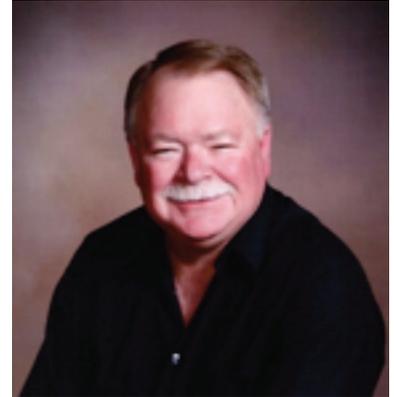
CONGRATULATIONS LARRY BENZ

MISSOURI LTAP CONGRATULATES LARRY BENZ ON HIS RETIREMENT

from the Cole County Public Works where he served as the Director since 2005. We also wish to thank him for his many years serving on the MO-LTAP Advisory Committee. A 1979 graduate of Missouri S&T (then known as University of Missouri-Rolla), Larry retired with extensive state and local agency experience having worked at MoDOT, MoDNR, and the Missouri Office of Administration Division of Facilities Management before accepting a position with Cole County Public Works as County Engineer.

Larry also had extensive involvement in professional associations as well as his community. He was one of the founding members of the Missouri Association of County Transportation Officials (MACTO), envisioning the need for an association for local transportation officials. He helped plan the very first conference in 2006 and will be celebrating the association's fifteen annual conference in Branson on October 6-7. Larry has also been a member of the American Public Works Association, Missouri Society of Professional Engineers, National Association of County

Engineers, Transportation Engineers Association of Missouri (past president), Capital Area Metropolitan Planning Organization, Cole County Emergency Response Team, Cole County Sheriff's Department (past reserve deputy sheriff), and a volunteer firefighter for the Cole County Fire Protection District.



A native Missourian, Larry grew up in Jefferson City and graduated from Jefferson City High School. He and his wife Carla have four children and several grandchildren. He enjoys spending time on his hobby farm raising cattle and fabricating equipment, utilizing his skills in welding and metalworking. Missouri LTAP wishes Larry much enjoyment and relaxation on his farm during retirement. We cannot thank Larry enough for his involvement in and support of Missouri LTAP.

PLACES TO GO: PAINTED ROCK CONSERVATION AREA

The lands of Painted Rock Conservation Area show evidence of occupation by Native Americans as early as 9,000 years ago. An Indian burial cairn, located along Osage Scenic Bluff trail, was constructed between 500 and 1,500 years ago.

Painted Rock Conservation Area consists of 1,480 acres. The Osage River intersects the property along the west boundary. Breathtaking views are offered from the Scenic Trail at two boardwalks and other locations. The forest contains six ponds, which are managed primarily for wildlife, and Clubhouse Lake. The forest consists primarily of oak and hickory, with the areas along the Osage River dominated by bottomland hardwoods. Several small glades can be found throughout the area and offer a kaleidoscope of wildflowers from May to October.

nature.mdc.mo.gov/discover-nature/places/painted-rock-conservation-area



Photo by Sam O'Keefe Photography
samokeefe.com

MISSOURI'S SAFETY CIRCUIT RIDER PROGRAM

LOCAL ROAD SAFETY PLANS – A TOOL FOR INCREASING SAFETY ON MISSOURI'S LOCAL ROADWAYS

For more than a decade, MoDOT and the Missouri Coalition for Roadway Safety have worked to determine safety areas and develop strategies for the state as well as local transportation systems. Reducing and/or eliminating fatalities and serious injuries on Missouri roadways remain the target. The Federal Highway Administration (FHWA) requires all states utilizing federal highway safety funds to implement a statewide highway safety plan (SHSP). While MoDOT uses the SHSP for its statewide approach for improving roadway safety on the state owned transportation system, a Local Road Safety Plan (LRSP) focuses on locally owned roads. LRSPs are data driven plans that assist in more easily conveying the safety and subsequent resource needs to decision makers as well as their constituents. Given nearly half of fatalities on the nation's roadways occur on local systems, LRSPs can play a significant role in enhancing transportation safety and reducing fatalities nationwide.

LRSPs allow Local Public Agencies (LPAs) to customize a plan specific to their location, geographic area, and budget since each LPA has different needs and resources. A LRSP will systematically identify and analyze safety problems and

RESOURCES

safety.fhwa.dot.gov/local_rural/training/fhwasa14088/local_rsp.pdf

safety.fhwa.dot.gov/local_rural/training/fhwasa12017/

safety.fhwa.dot.gov/provencountermeasures/local_road/#:~:text=A%20local%20road%20safety%20plan,safety%20improvements%20on%20local%20roads.&text=The%20process%20results%20in%20a,on%20the%20local%20road%20network.

recommend safety improvements. A LRSP offers a proactive approach to addressing safety needs and allows a LPA to readily address safety issues on its system. Moreover, LRSPs can vary widely from one LPA to the next. They may vary from a very detailed comprehensive plan such as a budget, design and construction project schedule, as well as maintenance issues to something as simple as noting striping and signing along with including mowing schedules and/or budgets. An additional consideration for a LRSP includes whether to utilize spot, systemic, or comprehensive countermeasures.

Regardless whether your agency has the funding and resources to address all safety issues, knowing the condition of your local system and identifying the needs and potential solutions demonstrates good stewardship. If you would like to learn how Missouri's Safety Circuit Rider Program could assist in developing a Local Road Safety Plan for your area, please contact me! To learn more about LRSPs on your own, the links below provide in depth resources.

Best Regards,
Gidget Koestner, P.E.
Field Liaison, MO Safety Circuit Rider



SAFETY CIRCUIT RIDER
PROGRAM

OPERATED UNDER MISSOURI LTAP

MISSOURI LTAP



OUR WORLD TURNED UPSIDE DOWN: PUBLIC WORKS DURING COVID-19

DURING THE TIME OF THE COVID-19 SHELTER-in-place, the role of public works professionals as first responders has become clear to a growing number of Americans. Those professionals—from engineers and public works directors to construction workers and operators—have stayed on the job to make sure that our water and sewer systems, parks and public spaces, and transportation networks are still functioning, even though the world has turned upside down. Here are some examples of the challenges and opportunities that the pandemic has created for the public works community where a few of the APWA Government Affairs Committee members work and live: the Monterey Bay Area, California; South Elgin, Illinois; Keene, New Hampshire; and Fox Point, Wisconsin.

LOCAL REVENUES REACH NEW LOWS

Cities, counties and special districts are experiencing sharp drops in revenues as sales decline, gas prices and fuel consumption fall, and hotel occupancy drops to record lows. Most public works jobs are needed, some even more than ever, but the revenues may not be there to support those jobs. Fuel tax revenues are a key source of funding for most cities and counties, but with gas prices falling to

new lows and dramatically fewer work, school and other auto trips, gas tax revenues are expected to drop by 30%, according to estimates by the American Association of State Highway and Transportation Officials.

IN CALIFORNIA, TWENTY-FIVE OF THE MOST POPULOUS COUNTIES RELY ON LOCAL SALES TAXES TO PROVIDE A SIGNIFICANT PORTION OF THEIR TRANSPORTATION FUNDING. WITH MOST RETAILERS CLOSED, SALES TAX REVENUES WILL FALL.

The Transportation Agency for Monterey County, California (pop. 425,000), is projecting a drop of nearly 23% in fiscal year 2019/20 sales tax revenues compared to the prior year.

Cities that are heavily dependent on tourism will lose out not only on sales tax revenues from those visitors but will also suffer a huge loss in hotel taxes, which range from 10% to 14% of the room rate. In most places, all spring and summer events and gatherings have been canceled, ranging from local fundraisers to the world famous Concours d'Elegance at Pebble Beach. These event cancellations will translate into millions of dollars of lost hotel taxes, conference center revenues and retail sales. Some of this funding will be lost to public works capital and operating projects, despite the fact that the vast majority of their work is essential and ongoing.

FEWER CARS, MORE BICYCLISTS AND PEDESTRIANS

During Easter week in Santa Cruz County, California (pop. 273,000), the Health Officer closed public parks and beaches, to send a message to visitors that they should stay home rather than make their usual pilgrimage to the coast. Even local surfers were told to stay out of the waves for a week. Officials feared that the holiday crowds would make it impossible to enforce social distancing and result in new levels of infections. In their zeal to protect the public, the Harbor District and the County also closed several pathways that serve as transportation corridors for bicyclists and pedestrians. County Supervisors got an earful from local residents who had to take circuitous detours in order to bike or walk along their usual routes. On heavily traveled pathways along East and West Cliff Drives, locals largely ignored the "Path Closed" signs. Communities breathed a sigh of relief when the paths, parks and beaches reopened, but the scenario of crowded beaches was averted, at least for that weekend. Local elected officials are now considering whether there are

opportunities to better accommodate all the new walkers with some neighborhood street closures.

TRAFFIC CONGESTION AT LANDFILLS

Public Works Departments have identified health, safety, and welfare as a core mission and the activities and operations that support these areas were deemed critical/essential, including the provision of solid waste and recycling activities. As the State of New Hampshire moved into its Stay-At-Home Order beginning March 13, 2020, the City of Keene (pop. 23,000) expected to see a drop in solid waste activities as businesses began closing-down operations. By contrast, during the first several weeks of the Stay-at-Home order there was a 14% increase in trips into the Transfer Station/Recycling Center on Saturdays, due to a surge in basement and garage cleanups. Those long promises of "Honey, I will clean the garage" occurred as people canceled trips and sheltered in place at home. An increase in trips to "the dump" also expanded into Mondays and Tuesdays. In addition, as the towns around Keene closed their smaller recycling centers, their residents came to the City of Keene's facility. According to Public Works Director Kurt Blomquist, the resulting traffic was so bad that the facility extended its Saturday open-to-the-public time from four to eight hours.

MORE YARD WASTE

Another side effect of Safer-at-Home orders is the amount of yard waste being produced by residents who are at home, with more time on their hands.

In the Village of Fox Point, a suburb in Wisconsin (pop. 6,600), there are normally two staff members collecting yard waste from roughly 2,500 properties. Says Scott Brandmeier, Director of Public Works, "During the shelter-in-place, the City has used up to six staff members (about half its labor staff) to stay on top of the amount of yard waste produced. On the Monday after Easter, we had to empty the packer three times before the end of the day."

To accommodate this extra workload, Fox Point took a different approach to managing its public works staff. While some communities were splitting their staffs and having half their crew show up every other week, Fox Point instead staggered breaks and lunch periods to maintain a good social distance. Maintaining full staffing allowed the department to manage increased yard waste (and garbage). The City, however, will soon be faced with the increased cost to dispose of these materials.

WASTEWATER: DON'T FLUSH THIS!

Another trend around the country has been an uptick in the wastewater collection system blockages. With the focus on disinfection, more and more people are using “flushable” wipes—which are not and never have been flushable—creating a growing problem for wastewater professionals. For example, the Public Works Department in the City of Keene experienced a dramatic increase in sewer blockage calls and the burning up of motors at pump stations as wipes and other products were wrapping around impellers. In Keene, the Public Works Department ramped up their “Don’t Flush This!” campaign to discourage residents from flushing anything except toilet paper and human waste down their toilets.

REDUCED TRAFFIC AND BETTER AIR QUALITY

A silver lining of the shelter-in-place has been a tremendous reduction in traffic and air pollution. With so many employees working from home, traffic congestion has fallen and smoggy skies around the world have cleared up. The City of Oakland, California (pop. 429,000), has taken advantage of the lower car traffic to close 10% of its local streets to make space for all the additional people who are walking around their neighborhoods. In Monterey County, California, (pop. 425,000), the Transportation Agency is looking for opportunities to use the space freed up from car traffic to test out temporary “road diets” that convert a four-lane road into a three- or two-lane road with wider bike lanes and pedestrian paths. The extra safety protection for pedestrians and bicyclists is particularly needed, since cities have also documented more collisions due to substantially higher driving speeds, as a result of less traffic on the roads.

LOWER CONSTRUCTION BIDS, AT LAST

In 2019, due to the strong economy, construction bids often exceeded cost estimates and cities were lucky to get a couple of bidders. According to Mike Millette, Public Works Director for the Village of South Elgin, Illinois (pop. 23,500), the COVID-19 economic slump has created a more favorable bid environment for cities that are proceeding with essential construction projects. South Elgin opened bids for its annual resurfacing program on April 16. While in the past they generally received three or four bids, in this case they received six. Said Millette, “Our engineer’s estimate was \$2.1M and the low bid was \$1.8M.

We noticed that all six bids were also under the engineer’s estimate, which is highly unusual. The \$300K difference will allow us to issue a second contract to perform additional resurfacing work.”

The Village of Fox Point, Wisconsin, echoes the sentiment of South Elgin: while other communities have been hesitant to proceed with their public works projects, those that have are seeing far more contractors bidding on the work with more competitive bid prices. As such, many cities and Departments of Transportation are ramping up road construction projects since the lower costs, as well as lower traffic on the roads, result in less disruption and more work for their scarce dollars.

POLICY IMPLICATIONS

The Government Affairs Committee is charged with developing a national policy platform for the next Congress (117th) that will be sworn into office in January 2021. These COVID-19 stories suggest several areas for continued emphasis which build on existing APWA national public policy priorities, including:

- Creation of a national labeling policy that removes the “flushable” label from disinfectant and other sanitary wipes that clog local sewer systems;
- Support for a new infrastructure investment program to take advantage of the low-bid environment;
- Encouragement of funding bicycle and pedestrian safety projects, such as road diets;
- Transition to a transportation financing system that does not rely on a per gallon gas tax; and,
- Support for creative recycling mechanisms to reduce yard waste and other landfill materials.

Story by: Debbie Hale, Executive Director, Transportation Agency for Monterey County, California; Kürt Blomquist, P.E., Public Works Director, City of Keene, New Hampshire; Scott Brandmeier, P.E., Director of Public Works, Village of Fox Point, Wisconsin; and Mike Millette, Director of Public Works, Village of South Elgin, Illinois; members of APWA’s Government Affairs Committee

apwa.partica.online/reporter/june-2020/columns/our-world-turned-upside-down-public-works-during-covid-19

COLLABORATIVE HYDRAULICS: ADVANCING TO THE NEXT GENERATION OF ENGINEERING (CHANGE)

Next-generation hydraulic tools improve the understanding of complex interactions between river or coastal environments and transportation assets, enabling better design, enhanced communication, and more efficient project delivery.

Practicing engineers and designers have used one-dimensional (1D) hydraulic modeling tools routinely for nearly 60 years. Although user interfaces have greatly improved during this time, the underlying computational techniques have remained the same. These modeling techniques apply several simplifying assumptions that can lead to overly conservative, inadequate, or inaccurate results and are insufficient to meet many of today's project requirements.

For example, in recent years, resource agencies have increased their focus on assessment of environmental impacts associated with river crossings. As a result, hydraulic engineers have become responsible for demonstrating that impacts have been avoided or minimized to the extent possible. Traditional hydraulic tools do not effectively support these levels of inquiry and analysis.

NEXT-GENERATION HYDRAULIC MODELING TOOLS

Two-dimensional (2D) hydraulic modeling software, graphical interfaces, and supporting resources are now available that can be applied to infrastructure design to improve understanding of the complex interactions between river or coastal environments and transportation assets. Recent advances in computer hardware, modeling software, Geographic Information Systems, and survey practices have made 2D modeling very efficient, intuitive, and accessible to engineers and designers.

Because 2D models avoid many of the limiting assumptions required by 1D models, the results can significantly improve the ability of highway agencies to design safer, more cost-effective, and resilient structures on waterways.

In addition, the 3D visualization capabilities of these modeling tools aid in communicating design results and

implications to a variety of stakeholders through intuitive and visually rich graphical output.

BENEFITS

- **Improved Quality and Resiliency.** 2D modeling results provide more accurate representations of flow conditions, including depths and velocities. Improved project quality may often be realized by using 2D modeling results to inform the location and size of structures, determine depths of bridge foundations, and analyze environmental impacts.
- **Enhanced Collaboration.** 3D graphical visualizations derived from 2D modeling offer better tools for communicating the often complex interaction between waterways, the transportation infrastructure, and the surrounding environment.
- **Streamlined Delivery.** Improved collaboration can help streamline project development, including environmental, regulatory, and engineering activities.

STATE OF THE PRACTICE

Technology developments in recent years have expanded the market of hydraulic modeling programs and tools. These tools significantly advance the state of practice and offer real potential to streamline project development.

Most States have an awareness of these new hydraulic modeling tools and their benefits. Additionally, FHWA has updated two National Highway Institute courses to support advanced modeling technologies: *Two-Dimensional Modeling of Rivers at Highway Encroachments* and *Hydraulic Design of Safe Bridges*.

fhwa.dot.gov/innovation/everydaycounts/edc_5/change2.cfm

SUMMERTIME, AND THE PLOWIN' IS EASY

Wilfrid Nixon, Ph.D., P.E., PWLF, President, Professional Snowfighters Association, Iowa City, Iowa; member, APWA Winter Maintenance Subcommittee

While it is absolutely true that plowing snow is a relatively trivial task in the summer months, it is not the case that this is a time for winter maintenance folk to simply kick back and relax, without a winter-related care in the world. The more work (of a certain type) you can get done in the summer, the easier the coming winter months will be. And yes, with apologies to a certain TV show, winter is coming. My father would drive my mother to distraction by reminding her at the end of June each year that “the nights are drawing in now!”

The major tasks that can be fruitfully addressed in the summer months include restocking, equipment preservation, and plan review. Spending time on each of these tasks will have significant payback in the coming winter season. And we should add to these a fourth area that often gets overlooked—employee development.

The summer is the best time of the year to get your salt (and other material) stockpiles refilled. It is also a good idea, while your salt storage facility is low on materials, to do a thorough scan of the building to look out for any potential trouble spots, and to fix any areas in need of repair. It is a lot easier to do this when there is less salt in the barn than when it is brimming full. It is also much easier to get salt delivered in the summer than in the

winter. Winter restocking is sometimes a necessity, but it is often difficult, and if you are short of material, the odds are your neighbors are too. Having enough storage for a typical year's usage of material is a really good idea—not always possible, but definitely a long-term goal if you do not currently have enough storage.

In addition to salt and other materials, the summer is a good time to stock up on other winter-related parts too. This includes cutting edges and any parts for your plows and your spreaders that you would expect to need to replace during a typical winter season. Again, having the parts on hand means that you will be able to fix anything that breaks on your trucks without having a (potential) multi-week wait for parts. The Boy Scouts have it right—be prepared!

Plowing snow is hard on vehicles, so the summer is a good time to give all of them a thorough review to make sure they have survived. In particular, your trucks need a really thorough cleaning to ensure that you have got all the salt (or other chloride) residue off the trucks. This must go beyond a simple scrub down! You are going to have to reach those parts that other cleanings did not reach! An increasing number of agencies are specifying equipment that is more resistant to corrosion (e.g., stainless steel boxes and aluminum cabs), but even those more corrosion-



resistant parts will benefit from a thorough cleaning. After the cleaning, and checking out all the belts, hoses, hydraulics, and electronics, it is a great time to calibrate your spreaders and also any liquid pumps that you might have on your trucks. An uncalibrated spreader puts down however much material it wants to on the road, not however much you need, and if you do not measure it you cannot manage it — so please, calibrate!

Nonetheless, the summertime is the right time to pull out that plan and give it a very careful review. One area that always deserves attention is your plow routes, primarily because things change from year to year (new developments, new schools, upgraded intersections, all sorts of things) and you may need to re-balance your plows so as to provide your desired level of service as efficiently as possible. And those levels of service may need a look as well. If you got a lot of push-back in the last winter season (for example, a lot of phone calls complaining about how long it took to clear residential streets) then taking a look at those levels of service and being sure that they are still what they should be (and are being effectively communicated to not only your staff, but also your elected officials and the community at large) is an important summer task. It is also a good time to review any memorandum of understanding with neighboring

agencies and to look at how you will interact with your local emergency services during winter events. Of course, your local emergency management center may be busy with summer events, but it is worth seeing if you can get with them to do a tabletop exercise or two where winter weather is included as part of the emergency as well.

And finally, there is the important task of employee development, or training if you prefer. Start by determining what caused the less than optimal performance and then focus on training to address that area of performance to avoid the sub-optimal outcomes in the coming winter.

While this is definitely a good way to go about some training, it can be even better to employ your front-line staff in a discussion about how the winter went and what went well and what went not so well. That way not only are you addressing needs for employee development, but you are involving your employees in determining where that development is needed. That gives them investment in the process and is likely to lead to more effective training going forward.

apwa.partica.online/reporter/july-2020/columns/summertime-and-the-plowin-is-easy

***TRAINING IN THE
TIME OF COVID-19***

The COVID-19 pandemic has resulted in (among other things) the cancellation of many meetings at both a national and chapter level, which has significantly reduced the opportunities for training that we have available for us and our workforce.

Those cancellations, combined with the inevitable pinch of agency budgets, may lead to a tendency to delay training altogether. I would like to suggest that such a delay would be an error, but at the same time to also provide some suggestions as to how you might get the best out of whatever training you do decide to have.

Training is best when there are very clear and measurable goals for the training. In other words, you know your desired “delta” going into the training, whether it is yourself or your workforce being trained. What do I mean by a delta? It is the change of state between “before training” and “after training.” Obviously, if our training is good then the difference between before and after will be that those who have been trained (which might be ourselves) have learned something!

In actual fact, we want our training to go beyond simple learning—we want those trained to be able to do new things (or do old things better) after they have been trained. And in order for that to happen, people need to be fully engaged in their training. This means that training that comprises mostly someone speaking to a bunch of folks (giving a presentation) is not necessarily the best way of training. The photograph shown to the right demonstrates the sort of reaction that we want when we are training people. The folks in that photo were given some information during one presentation, then challenged to discuss it and see if they could figure out how to apply the new knowledge into their everyday tasks. It is apparent that the folks in that photo are fully engaged in

their discussion and as a result the training was a great success.

All of which poses a significant challenge to us in this time when we do not want to put 100 people together in a room in close proximity and ask them to interact vigorously! Training is now much more likely to be solitary, either working your way as an individual through an online training program, or perhaps listening to a webinar. Over the years I have done a number of webinars and a few online courses too, and from a teacher’s viewpoint I would much rather teach in person rather than remotely. But I would also much rather people had some training, even if it is by remote means, than none at all.

There are also ways in which you can help make online training of whatever sort more effective.

If you view the webinar or the online class as only the first part of the training you then have the opportunity to build upon it and to get the same level of interaction that you might see in really good classroom type training.

Without getting too far down the rabbit hole of educational theory, good training requires people to internalize the information they have received.



Photo from APWA



team's use of liquids, or perhaps even how you might start using liquids in your operations—perhaps by discussing what you would need to have in order to be able to use liquids. These types of discussions help to focus and reinforce the learning and move you toward implementing the new knowledge to improve your organization's performance.

Of course, right now you might not be able to get all your team members into a single room because of social distancing issues, but you would still be able to use teleconferencing software (it is widely available now, and many people are making much more use of it than they did six months ago!) or to have small (appropriately socially distanced) team meetings with sub-groups of your teams. But the point is to do the follow-up—that makes the initial training a great deal more effective and worthwhile.

One way of doing this is discussion (which is why good classroom training includes significant time for attendees to have discussion) but not just any discussion will do—the more focused the discussion is, the better. So, if your winter maintenance team members are all getting some training through a webinar, you will see more lasting value from that webinar if you take some of the key points from the training that are most applicable to your situation and hold a discussion about those points with your team members after the initial training.

Suppose you and your team had attended a webinar on using liquids in winter maintenance. The discussion afterward might focus on how you could improve your

The coming months are not likely to be easy in public works, and in particular budgets might be tight. There is always the temptation to cut things like training in such situations. However, I suspect that new ideas and new approaches will be key to getting us all through these trying times, and if that is true, then training is the last thing you should be without.

apwa.partica.online/reporter/june-2020/columns/training-in-the-time-of-covid-19.



**National
Center
for
Rural
Road
Safety**

YOUR TRUSTED “SAFETY SIDEKICK” TO MAKE RURAL ROAD TRAVEL SAFER!

The National Center for Rural Road Safety opened in December 2014. Funded by the Federal Highway Administration, this Center of Excellence is focused on enhancing safety on rural roads by supporting local, state and tribal road owners and their stakeholders. Resources include education, training, tools and technical assistance.

To learn more about the National Center for Rural Road Safety, visit their website ruralsafetycenter.org

Please visit our website for other training courses:

MOLTAP.ORG

Level I

\$45/person
8:00 AM - 12:00 PM

Level II and Super Scholar (LIII)

\$55/person
10:00 AM - 3:00 PM
Lunch is included

For non-government or for-profit organizations, call 1.866.MORoads for rates

Attendance Policy

The Missouri LTAP staff would like to remind all agencies registering for classes that it is important to sign-up before the registration deadline to allow us time to plan for course materials, refreshments, etc. It is equally important that you let us know at least 48 hours before the class if some of your employees will not be attending. Please note that you will be charged for any no-shows; therefore, it is very important that you let us know at least 48 hours before. This policy was approved by our Missouri LTAP Advisory Board and ensures that we have an accurate count for class attendance. Thank you and we look forward to meeting your training needs.

Need training but don't have the budget to pay for travel expenses?

We can train your employees on location for a minimum of 20 people. You can invite other interested agencies in your area if necessary to meet the minimum. Call and discuss your training needs with our staff.

CONTACT US TO FIND OUT MORE!

**T: 866.MO ROADS
(667-6237)**

E: moltap@mst.edu

MO-LTAP SCHOLARS PROGRAM

A Training & Recognition Program



About The Program

The primary purpose of the MO-LTAP Scholars Program is to recognize skilled transportation and public works personnel in local agencies throughout Missouri. The program is intended to enhance the skills of all those involved in the maintenance, delivery, and management of local transportation and infrastructure. Training is aimed at increasing each participant's technical, maintenance, administrative, and supervisory skills depending on the program level. Electives can be selected to meet the individual's area of responsibility. Special emphasis will be given to safety in the workplace as well as in the field and in the development of a local transportation system. The program will allow participants to attain three levels of achievements: Level I, Level II, and Level III Super Scholar. Participants must complete the requirements for Level I before completing Level II.

Getting Started

Registration is available on the Missouri LTAP website (www.moltap.org). There is no registration fee for the program, but there is a fee for each class, which varies for each level. Classes are offered on an ongoing basis at various locations throughout the state. Contact Missouri LTAP for classes in your area or view the online training calendar.

Recognition

Certificates will be awarded by the Missouri LTAP Director to those individuals who successfully complete the requirements of the program during award ceremonies held at various conferences throughout the state and/or at a ceremony held at the graduate's place of employment.

LTAP TRAINING RESOURCES

FHWA Essentials for Local Public Agencies

Federal-aid Essentials for Local Public Agencies is a transportation resource designed to help local agency professionals navigate the Federal-aid Highway Program. Federal-aid Essentials is structured for busy agency staff who want further understanding of Federal-aid policies, procedures, and practices.

fhwa.dot.gov/federal-aidessentials/indexofvideos.cfm

Missouri Local Public Agency Program

The Federal Highway Administration (FHWA) and MoDOT offers a free 4-hour training class designed to meet the recently implemented requirements for a Full Time Sponsor Employee to serve the role as the Person In Responsible Charge in order to receive Federal-aid funding for Locally Administered Projects. Local public agencies and consultants will be required to have taken this basic training course.

design.modot.mo.gov/lpatraining/

APWA – Professional Development

APWA offers online, face-to-face, and on-demand programs, with educational content that fits within your time and travel constraints. The Donald C. Stone Center provides professional development opportunities for the next generation of public works leadership.

apwa.net/learn

NHI – Training Resources

National Highway Institute, NHI, is the training and education arm of the Federal Highway Administration (FHWA) with its rich history of innovation and expertise in delivering transportation training.

nhi.fhwa.dot.gov/home.aspx

FOLLOW US ON
SOCIAL MEDIA!



Missouri LTAP | @LTAPMO



Missouri LTAP | @Missouri LTAP

UPCOMING EVENTS

Due to cancellations of upcoming conferences, please follow us on Facebook and LinkedIn for the most up to date information regarding events.

15th Annual MACTO Conference
Branson, MO | October 6-7, 2020

Spring Creek Gap Scenic View, MO
Photo by Sam O'Keefe Photography

MISSOURI STATE SAVINGS SURPLUS

MISSOURI STATE AGENCY FOR
SURPLUS PROPERTY

Check out the thousands of items in
stock at MOSASP!

2846 Highway 179 | Jefferson City, MO 65109
888.295.7796 (Toll free | 573.751.3415)

For information about the program,
visit: oa.mo.gov/purch/surplus.html

Eligibility requirements can be found under
"Read about the Program"

REALTY FOR SALE

The Missouri Department of Transportation is responsible for managing realty assets owned by the Missouri Highways and Transportation Commission. Realty assets are periodically reviewed to determine if they are essential to current operations, or are expected to be in the near future. When realty assets are no longer essential to operations, they may be made available for sale to the public.

VISIT:
[www6.modot.mo.gov/
PropertyForSale](http://www6.modot.mo.gov/PropertyForSale)



MODOT SAVINGS SURPLUS

MAKE YOUR DOLLARS GO FURTHER WITH
MODOT SURPLUS PURCHASING!

Prices, mileage, condition, and purchasing
instructions can be viewed online:

modot.mo.gov/business/surplus

**NO EQUIPMENT FOR SALE
AT THIS TIME**