Roadmap created for Unified Permitting Process

The second phase is nearing completion of a project aimed at creating a Unified Permitting Process (UPP) for oversize/overweight vehicles in Minnesota. One outcome of this phase is a roadmap that will define steps for future phases, including statewide implementation.

Personal protective equipment: new resources for Minnesota local agencies

Hot asphalt. Sharp objects. Loud machinery. Harmful fumes. Distracted drivers. These hazards and many others can turn the workplace into a danger zone for transportation workers.

Personal protective equipment, or PPE, is one way to protect workers from serious workplace injuries or illnesses resulting from physical, electrical, mechanical, chemical, or other workplace hazards. Examples of PPE include hard hats, face shields, goggles, gloves, vests, respirators, safety shoes, and coveralls.

A project sponsored by the Minnesota Local Road Research Board has created a set of materials to raise awareness of workplace hazards and encourage the proper use of PPE. The materials—three posters, a fact sheet, and a web page—are customized for Minnesota and targeted to local transportation agencies.

The new materials were created under the guidance of a technical advisory panel led by John Brunkhorst, county engineer/public works director of McLeod County.

New from Clear Roads: guides, videos

Utilization of AVL/GPS technology: case studies

Researchers profiled six state DOTs that use automatic vehicle location (AVL) and GPS in winter maintenance fleets. These case studies provide guidance for successful implementation and can serve as templates to help agencies get the best value out of different levels of AVL/GPS applications.

Emergency operations methodology for extreme storms

As severe winter storms become increasingly common and potentially more disruptive, state DOTs are responding with planning that goes beyond routine winter maintenance activities. Based on six case studies, researchers found that agencies with effective response plans for severe winter weather employ a transportation emergency management office, facilitate interagency cooperation, and embrace technologies for tracking and reallocating equipment. Investigators distilled recommended best practices and grouped them into two categories: organization and communication, and planning, training, and review.

Liquid-only plow routes

This project created two videos that explain the benefits of liquid-only plow routes, describe how and when to use them, and outline the steps to implement a program. Two accompanying guides were also created—a technical reference guide and a start-up reference guide.
Some nuggets from the guidebook:

• Improperly applied or installed stop signs have poor compliance rates and may create driver confusion.

• ”Children at Play” and Deaf/Blind/Autistic person types of signs should not be installed; they are commonly being removed by agencies.

Rich Sanders receives TZD Star award

Rich Sanders, a member of the Minnesota LTAP Steering Committee, received the Engineering Star Award at the Minnesota Toward Zero Deaths Conference on October 23 in Mankato. Sanders has been the Polk County engineer since 2002 and a past-studying member of the Polk County TZD Coalition. Here are some highlights from the Star Awards ceremony brochure:

Rich has a long history of dedication and commitment to the TZD focus areas and mission. He willingly and expertly advocates at a local and state level to key decision makers and stakeholders on behalf of county transportation infrastructure, with a strong focus on safe, reliable transportation systems for communities.

Rich delivered the first district-wide 6-inch edge-line striping plan for District 2 in 2010 and the first intersection lighting plan in District 2 in 2011. Since then, Rich has been a leader in District 2 when it comes to Highway Safety Improvement Program projects. He started the second phase of the county safety plan, which focuses on other safety improvements to the county’s highway system. Rich routinely includes rumble strips, 6-inch edge lines, and 2-foot shoulders on his projects regardless of funding because he knows those measures improve safety.

Congratulations, Rich!
Local OPERA project: Project management with BrightWork

Who led the project?
Darin Mielke, Carver County Public Works

What was the need?
Carver County Public Works uses Microsoft Project® to manage construction project schedules, but only for large projects. MS Project requires training and is cumbersome for smaller projects. Staff were looking for a project management software scalable to a project’s size and scope. Further, they wanted an alternative to their traditional electronic file folder system on a shared network, because the system does not roll up reports from multiple projects efficiently.

What was tested?
Carver County Public Works purchased, installed, and tested BrightWork, a project management add-on for Microsoft SharePoint. Also, staff implemented an ArcGIS online map that displays all construction projects and includes a link to each respective BrightWork project.

How was it done?
Considerable internal time with Public Works and IT staff was needed to install, set up, and customize BrightWork to meet the needs of highway construction workflows. Time was also needed with IT staff to troubleshoot integration, specifically with the county’s GIS data. Public Works staff created templates that will be used within the project schedules and documents. They further tested the system to determine needs for further refinement.

What were the results?
BrightWork was able to satisfy all the evaluation criteria. The ease of standardizing templates and finding and working on project-related documents was shown to be a great tool. BrightWork was able to integrate with the county’s GIS data, as GIS staff developed what they called a Project Registry map app. Instead of searching through a file folder structure to find a project folder, a user will go to an interactive ArcGIS online map, choose the project within the map app, and then click on a link to go directly to the project site.

Further, outside the scope of this study, Carver County installed Harmon.ie—an add-on for SharePoint and Outlook—that allows users to save emails directly to the BrightWork project document library.

What’s next?
The county plans to migrate all of its future projects to BrightWork. The ability to track assigned tasks and to provide reports to management is a key feature that the county plans to utilize going forward.

What should other agencies consider?
If an agency is planning to implement BrightWork on-premise, Carver County Public Works encourages engaging with IT staff to determine the necessary hardware and software requirements. For small agencies, staff recommend the hosted BrightWork solution. While the hosted solution requires a monthly fee, it will likely be less costly for a small agency with 10 or less users.

OPERA funding: $20,000

Funding is available — please send us your ideas!
FY19 funding is still available from the Local OPERA Program. If you or your staff have an idea—perhaps a new tool, process, or design—and you need funding to develop it, please see the OPERA website to submit a proposal.

Personnel Protective Equipment (PPE)

Both employers and employees have responsibilities for maintaining a safe work environment:

- Supervisors and managers must assess workplace safety. If they cannot eliminate hazards through engineering, work practice, or administrative changes, they must provide PPE as the last resort.
- Maintenance workers should use PPE as required to reduce injuries and fatalities.

The new materials—three posters and a fact sheet—make the case for safety in a concise, visual format. Agencies are encouraged to display the posters in their shops, lunch rooms, and other work areas. All the materials are available for free download at mnltap.umn.edu/PPE. The site also includes links to source materials, state and federal policies, and other materials.

Learn more:
- PPE for Minnesota Local Transportation Agencies: mnltap.umn.edu/PPE
- US OSHA PPE: osha.gov/SLTC/personalprotectiveequipment
- Personal Protective Equipment (US OSHA 3151-128 2004)
- Minnesota Department of Labor and Industry and Minnesota OSHA: doli.state.mn.us

By Minnesota statute, employers must provide PPE required for employees to perform their jobs safely. PPE should only be used when all practical administrative controls have been implemented, but are not enough to adequately protect employees from workplace hazards that can cause injury. Employers must also comply with all applicable Minnesota OSHA standards.

The U.S. Occupational Safety and Health Administration (OSHA) requires that employers protect employees from workplace hazards that can cause injury. If such hazards are present, you must select protective equipment that properly fits your workers.

Supervisors and managers must assess workplace safety, work practice, or administrative changes that may be physical or health-related, and a comprehensive hazard assessment should identify hazards in the workplace. But are not enough to adequately protect employees from workplace hazards that can lead to injury. Employers must also comply with all applicable Minnesota OSHA standards.

Personal Protective Equipment

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A sustainable local bridge program: what would it take?

The 15,187 county, city, and township local bridges in Minnesota are an essential link in moving Minnesota’s products to market and citizens to their destinations. Unfortunately, like other infrastructure, they do not last forever. Bridges wear out, deteriorate with age, and become inadequate due to heavier loads and more traffic.

According to Minnesota Bridges (December 2017), a MnDOT Bridge Office report, 467 local bridges are in poor condition and need repair or replacement. It is important to note these are not unsafe bridges. Public safety is protected by Minnesota’s rigorous bridge safety inspection program. Our bridge inventory is routinely monitored and carefully inspected to meet federal regulations.

Results of these inspections may require posting load restrictions or closing the bridge. Currently there are about 61 closed or very-low-weight restricted bridges. Some of these may be closed because changing traffic patterns have reduced their need. However, the bulk of these posted or closed bridges carry a real cost. They result in detours, lost time, and additional travel costs, and, in some cases, result in safety concerns for emergency vehicles. Farmers have to haul their crops further during the short harvest period, school bus routes are longer, and tourism destinations are less accessible. Emergency access for fire, police, and ambulance takes longer. An ambulance responding to an emergency heart attack call may have to detour several miles.

This article reviews the annual cost of sustaining a safe, adequate system of local bridges and the amount currently being invested in these bridges. The 2017 MnDOT Bridge Office Report, the 2018 Minnesota Infrastructure Report Card from the American Society of Civil Engineers (ASCE), and discussion with bridge experts helped me better understand the problem.

— Alan Forsberg, P.E., retired Blue Earth County Engineer

**Annual cost of sustaining a safe and serviceable local bridge system**

It is difficult to estimate this annual cost; however, by approaching the question in several ways, a credible estimate can be made. Three approaches are considered here.

1. **Changes in funding and numbers of bridges in poor condition over time.** There are currently about 467 local bridges in poor condition in Minnesota, according to the 2017 MnDOT Bridge Office report. This number will grow as bridges age and suffer heavier loads and more traffic. Review of the report shows the number of bridges in poor condition declined for several years. During these years, significant state bond funds in the amount of $20 million to $60 million per biennium were available to assist local governments with the replacement of their bridges. This money complemented local, federal, and other town bridge funds, for a total investment in local bridges of about $35 million to $55 million per year.

   Since 2006, about $340 million in state bond funds leveraged the replacement of 1,003 local bridges at an average cost of $400,000. However, in recent years, with very limited state funds available and a few very large projects requiring significant amounts of this funding, the number of bridges in poor condition has plateaued and is even increasing.

2. **Local commitment to replacing bridges.** The local sponsor must pay for costs associated with right-of-way acquisition, engineering and design, removal of the old bridge, and construction of road approaches. Local commitment to replace a bridge, considering constrained local budgets, is therefore a good indicator of need.

   According to MnDOT State Aid data, local governments have committed by resolution to replacing 952 bridges (2018–2021 bridge priority list). There are 140 unfunded bridge projects with plans approved or in queue with the state for approval. Based on this data and past MnDOT bridge bonding requirements of $50 million per year of state funding is needed to complement local, federal, and town bridge sources of funding. This would result in a total investment of about $74 million per year in our local bridges.

3. **2018 Minnesota Infrastructure Report Card.** ASCE develops a report card on the state of our infrastructure. The 2018 report for Minnesota was recently released. The report shows $100 million per year is needed to replace bridges on the local system in order to sustain a safe system of local bridges.

   Considering the three approaches, a total of about $75 million per year from all local, state, and federal sources is conservatively needed to sustain a safe and serviceable local bridge system for Minnesota.

   **Funds available for local bridges**

   - **Town Bridge Fund.** About $16 million per year is constitutionally dedicated for replacement of township bridges from the Minnesota Highway Tax Distribution Fund ("state gas tax fund"). This regular, consistent funding has worked well, slowly reducing the number of township bridges in poor condition.
   - **Federal BROS fund.** About $5.3 million per year is available through the Federal Bridge Replacement Off-System (BROS) program. This is competitively allocated for bridges over a 20-foot span that are not on the federal highway system (off-system bridges).
   - **State bridge bonds.** This program has for several decades provided funds to leverage federal, State Aid, and local bridge funds. From 2006 to 2014, funds in the amount of about $20 million to $60 million per biennium were appropriated. In 2015, $7.4 million was appropriated by the legislature; in 2018, it was $5 million.
   - **Motor vehicle sales tax on leased vehicles.** In 2017, the legislature passed a law allocating 13 percent of the sales tax on leased vehicles to assist with local bridge replacement. The first allocation in 2018 provided $12.6 million for local bridges.

   **Local property tax funds.** In 2018, MnDOT State Aid estimated local governments invest about $2.3 million per year. This does not include local bridges replaced with 100 percent local funds where data are not available.

   **Total local bridge funds available**

   Combining these sources yields $41.2 million per year (using the 2018 bonding appropriation). This is about $34 million per year less than the $75 million per year needed to sustain a safe and serviceable Minnesota system of local bridges.

   **Potential for meeting the shortfall**

   The town bridge money is a regular source of constitutionally dedicated funding available only for township bridges. It appears to be meeting the need, with the number of deficient bridges slowly declining. Funds have typically been available when a township has chosen to advance a project.

   The federal BROS fund does not appear to have the potential to meet the need.

   The Minnesota sales tax on leased motor vehicles is very helpful because it creates a regular, consistent source of funds. However, it is not constitutionally dedicated and is subject to loss with changing legislative priorities.

   State funds in the amount of about $34 million per year, or $68 million per biennium, either through state bonds, direct appropriation, or some other mechanism beyond the sales tax on leased motor vehicles and town bridge funds, appears to have the best potential for sustaining a system of safe and strong Minnesota local bridges.
The permitting platform will connect various software and data sources. Currently, haulers need to apply for oversize/overweight (OSOW) permits with each individual roadway authority they will travel through. MnDOT, counties, towns, and cities all administer permits for their own roadways—so several different permit applications and processes can be required for a single haul. "The streamlined permitting process is expected to increase efficiencies for the freight industry, which is good for our economy," says Clark Moe, systems coordinator with MnDOT’s Operations Division, Office of Maintenance. "It will also enable more effective enforcement and help us preserve the quality of our road network."

Through the UPP, agencies should have a better idea of what’s happening on their roads, says Rich Sanders, county engineer for Polk County. "Throughout the state, there are a lot of hauls we don’t even know about, let alone if they will use a restricted bridge or road."

UPP Phases I and II

Phase I of the UPP project examined the feasibility of implementing a permitting platform. Completed in 2017, this phase included listening sessions across the state with the hauling industry, local agency engineers, law enforcement, state agencies, and MnDOT staff. Eighteen public and private entities collaborated to develop policies, processes, and plans for UPP technology. The final report concluded that a reference platform system for processing permit applications would be the best approach to explore.

Phase II was a proof-of-concept pilot project spanning St. Louis County, Polk County, the City of Duluth, and MnDOT Districts 1 and 2. The goal was to see if a permitting platform would work across jurisdictions connecting various permitting software and using multiple system processes. "The platform has to be usable in different ways and be able to channel payment back to MnDOT or a county or city," Sanders says. "Phase II showed UPP could work."

Phase II also underscored the complexity of the issues to come. "The vision is for haulers to enter their license data, and the required permit data would automatically populate the permit," says Mitch Rasmussen, assistant commissioner with MnDOT State Aid. "But all kinds of software systems are now in use by local agencies, and MnDOT’s Office of Freight and Commercial Vehicle Operation is preparing to replace the two online systems it’s been using for decades. All the systems will need to talk to the unified platform. It will take time and money to build. The roadmap from Phase II can help us get there."

Policy and fee differences are another challenge. To gather context and ideas, MnDOT recently completed a Transportation Research Synthesis to explore the practices of other state transportation agencies in setting, collecting, and distributing permit fees for heavy commercial OSOW vehicles (see sidebar). Another MnDOT study is under way to gather basic data about the permit fee policies of counties in Minnesota and throughout the country, including authority for the fees, cost range, and fee types.

When Polk County switched from a paper system to an electronic one, industry started applying for permits more consistently, Sanders says. With the paper system, five or six permit applications would be faxed in each year, and approval could take two days. But with its online system, the county received 201 applications between January 1 and October 26, 2018. "Approval might take us 30 seconds," he notes.

UPP work to date has been funded by MnDOT and the Minnesota Local Road Research Board. Others involved include the Federal Highway Administration, state agencies (Minnesota Department of Public Safety, Driver and Vehicle Services, Minnesota State Patrol, Minnesota IT Services Geospatial Information Office), associations (Minnesota Association of Townships, Minnesota County Engineers Association, Associated General Contractors of America), private businesses (ProWest, SRF Consulting, Midstate Reclamation & Trucking, Tiller Corporation), and educational institutions (Upper Great Plains Transportation Institute, NDSU; Alexandria Technical & Community College). UPP Phases I & II were a unique collaborative public-private partnership to resolve a long-standing problem.

Next phases and final outcome

Moving forward, Phase III will begin development of the unified system using real data from multiple road authorities and databases in MnDOT Districts 1 and 2. Phase IV will take the platform beyond Districts 1 and 2 and roll out the system for testing statewide. Estimated completion is two to three years.

"Under current plans for the unified system, Minnesota road authorities will continue to set their own fees and may be able to connect their existing software, although some interoperable adaptations will be needed," Moe says. "The new permitting process will focus on education for haulers, permitting agencies, and the public, as well as engineering decisions by agencies. This, in turn, will lead to increased enforcement effectiveness to help preserve road quality while boosting the economy."

"Many decisions are still on tap," Rasmussen adds. "There’s no decision yet of who’s going to own it and manage it, for example, or what fees might be recommended. There are a million moving parts, and many agencies and interests are involved. But we’re taking big strides toward our central goal: putting the right load on the right road, the right way, right away." —Pamela Snapl, LTAP editor

Learn more:

- Unified Permitting Process story map (see the Exchange online for the link).
- Transportation Research Synthesis: Online Systems for Oversize and Overweight Freight Permitting and Motor Carrier Credentialing (MnDOT TRS 1704, Sept. 2017)

Report synthesizes permit fee policies for oversize/overweight vehicles

A new Transportation Research Synthesis from MnDOT presents findings from a survey of selected state departments of transportation and other state agencies with experience in OSOW permitting. The survey sought information about each agency’s OSOW permit fee structure; the statutory basis, purpose, and allocation of permit fees; the state’s level of engagement with local agencies; and special policies associated with the movement of OSOW loads. Statutory references, research reports, and other resources provided by survey respondents supplement survey findings.

Learn more:

- Transportation Research Synthesis: Permit Fee Policies for Oversize/Oversize Vehicles (MnDOT TRS 1807, Aug. 2018)
Roads Scholars: Where are they now?

What paths have Roads Scholars taken since graduation? In this issue we hear from Troy Walsh, a 2014 grad. He has been a Loss Control Consultant Fire & Public Works Specialist with the League of Minnesota Cities (LMC) Insurance Trust for the past four years. Before that, he worked in public works maintenance with the City of Victoria for 15 years.

What did you like best about the Roads Scholar Program?

I enjoyed the variety of courses and the networking with others in the industry. Reviewing the work, history, and the process for the future was great. The skills are something I still use today.

What's a typical day like on the job?

Day to day, I work with cities to help them reduce liability and reduce or even eliminate insurance claims. I meet with city staff to discuss what they can do to make systems safer, and I sometimes suggest courses they might take. Some Roads Scholar topics stand out—load securement is a good example, plus others like signage and work zones.

How does being a Roads Scholar help you in your work?

It was perfect for my past job in public works, and it also gives me some great credibility in my loss control position. Having experience and training in public works makes it easier to talk with city staff. I can discuss the types of projects I helped oversee in Victoria and share some of the skills I learned in the Roads Scholar Program. I believe this helps me be a better employee and a better consultant to help our member cities reduce injuries and insurance claims, as well as reduce risk to the cities.

What has been the most surprising part of your work?

One fun thing I didn't realize is how cities are so diverse. Cities right next to each other, with the same size staff and population, may do jobs so differently. One city might prioritize parks while others focus more on sewer maintenance or streets. Some priorities are driven by city staff, others by city councils.

Where do you see yourself going from here?

While working for Victoria, I also earned a fire science degree. At LMC, I handle both public works and fire safety. Improving safety is my passion.

What can people learn from your path?

You don't know where training and education courses will take you. I loved public works and never thought I'd be where I am now. But with LTAP and fire science training, I learned other things, and my career path turned in a way I'd never expected. There are careers out there that haven't been developed yet.

“\nYou don't know where training and education courses will take you.”

—Troy Walsh, 2014 Roads Scholar

Roads Scholars honored at maintenance expo

At a ceremony held as part of the Minnesota Fall Maintenance Expo in St. Cloud, LTAP presented certificates to 9 of the 20 maintenance workers who completed Roads Scholar training requirements during 2017. Left to right: Jack Brosh, Nolan Sprengler, Jamey Hecksel, Josh Rosckes, Jeremy Greenwaldt, Timothy Mueleners, Chad Christopherson, Charles Larsen. Above: Anthony Voigt.

Every Day Counts launches round 5

The Federal Highway Administration will promote 10 technologies and practices in the fifth two-year round of Every Day Counts (EDC-5), the state-based program to rapidly deploy proven but underused innovations to shorten project delivery and enhance the transportation system.

Among the EDC-5 innovations transportation stakeholders are encouraged to explore in 2019 and 2020 are strategies to reduce rural roadway departures, project bundling to pare construction backlogs, and techniques that use crowdsourcing to advance operations.

Starting in January 2019, EDC-5 deployment teams will provide technical assistance, training, and resources to help transportation agencies and stakeholders adopt the innovations. “The goal is to bring these things to your everyday practice” says David Scott, assistant division administrator with the FHWA’s Minnesota division. “These innovations are ripe enough to share, and agencies can learn from others that have solved the same problems.” Deployment activities might include a peer exchange, a pilot project, and changed specs.

Learn more:
- Every Day Counts round 5: fhwa.dot.gov/innovation/everdaycounts

EDC

Every Day Counts is the FHWA’s initiative to advance a culture of innovation in the transportation community in partnership with public and private stakeholders.
The calculator may have many components and phases. It will calculate normal truck-weight limits as well as weights for restricted roads or for special permitted commodities such as raw or unprocessed agricultural commodities or construction materials. This could, in time, also be a tool for permitting for all levels of road authorities,” Hayes says. “It’s a work in progress that could eventually be used by many entities, including the Unified Permitting Process also under development in Minnesota.” (See article about UPP on page 6.)

The calculator is not yet available to the public. “Our plan is to embed it first into the Minnesota Truck-Weight Education Program to act as a beta test looking for possible issues,” he says.

Search me
The Minnesota LTAP website features custom search engines to help you find information. You can search:
• LTAP & TTAP Centers
• State DOTs
• Transit agencies
• University transportation centers

Other great resources are:
• LRIPs site: lrirp.org
• MnDOT Library's catalog: dot.state.mn.us/library

Truck-weight calculator in development
A truck-weight calculator for Minnesota is under development. It will be a custom version adapted from the one currently in use by the North Dakota DOT.

“In 2015, North Dakota LTAP staff met with our Minnesota truck-weight training staff and took our Minnesota course,” says Greg Hayes, instructor with the Minnesota Truck-Weight Education Program. “Shortly afterwards, they used the Minnesota program to make their own truck-weight training and configured it around North Dakota truck-weight laws. They immediately saw the advantage of a truck-weight calculator to assist the students with truck configuration issues involving weights and lengths.”

In 2018, staff from the Minnesota Truck-Weight Education Program, the Upper Great Plains Traffic Institute, MnDOT, the Minnesota Association of Townships, and the Minnesota State Patrol met at the Alexandria Technical and Community College to discuss the calculator and what purposes it would serve. “Conversations taken back to St. Paul led to the calculator being authorized for development in accordance with Minnesota truck-weight laws,” Hayes says.

Minnesota’s version is being developed with the assistance of the Upper Great Plains Traffic Institute. Brad Wentz, former Becker County engineer, is at the helm of adapting it for Minnesota laws, Hayes says.

To plan and design bridge investments for the future. A consistent, regularly funded program is needed to maintain bridge replacement capabilities and promote cost efficiencies.

Trunk highway bridges. After the tragic I-35W collapse, several large trunk highway bridges in poor condition were replaced. This addressed a serious problem but diverted public attention from other bridges in poor condition. There remains a significant need to replace trunk highway bridges as well as local bridges.

Bonding. New bridges being constructed are durable and strong, with a typical life expectancy of 75 years. Because these bridges have a long-term benefit to the public, bonding is an appropriate financing method.

In summary, local bridges are essential, and a regular state investment is needed. If not addressed, the deferred cost will grow and become ever more difficult to address.

Learn more:
• Minnesota Bridges (MnDOT, Dec. 2017): dot.state.mn.us/bridge
• ASCE 2018 Minnesota Infrastructure Report Card: infrastructurereportcard.org

Bridge from page 4
Some additional considerations
Budget busters. A few “budget busting” bridge projects have taken large amounts of state funding for local bridges in recent years. These are needed projects, but their high cost detracts from the ability to meet the state’s overall local bridge replacement challenge. A separate funding method for the “budget busters” bridges could be considered, or state funding for local bridges could be increased to compensate in the years of these large projects.

Consultant capacity. Local bridge replacement is dependent on private engineering consultants to design them and contractors to construct them. Large peaks and valleys in funding over the years results in an industry losing capabilities in lean years and being overloaded in peak years. This is inefficient. It also makes it difficult for local governments to plan and design bridge investments for the future.
For details and an up-to-date list of events, please see mnltap.umn.edu.

ONLINE TRAINING: Anytime, anywhere!

- Culvert Design and Maintenance (1 RS credit) LTAP
- Work-Zone Safety Tutorial (0.5 RS credit) LTAP
- Turfgrass Pathology Course (0.5 RS credit) LTAP

PLEASE NOTE: Two of our online courses are unavailable while we transition to a new learning management system. We hope to have the courses ready in early 2019 and will send an electronic announcement when they are.

- Sign Maintenance and Management for Local Agencies
- Gavel Road Maintenance and Design

Culvert Installation, Maintenance, and Inspection (1 RS credit) LTAP
March 7, Duluth
March 28, Medina
Apr. 4, Rochester

Annual CPAM Concrete Paving Workshop & Awards Banquet
March 14–15, Breezy Point

Minnesota Truck-Weight Enforcement Training
LTAP
March 15, St. Cloud
March 19, Albert Lea
March 26, Two Harbors

ATSSA Northland Chapter "How To" (0.5 RS credit) LTAP
March 19–20, Fargo

Minnesota Roadway Maintenance Training and Demo Day (1 RS credit) LTAP
May 16, Rochester

National Road Research Alliance Pavement Workshop
May 22–23, MnROAD, near Albertville

ADA training for local agencies: construction

The third and final course of LRBB-sponsored training on the federal American with Disabilities Act (1990) has been scheduled for this spring.

The third course—construction—will provide attendees with an understanding of how to construct pedestrian facilities that provide accessibility in the public right-of-way, from initial surveys and layout through the final documentation of compliance checklists. The course covers the construction requirements of the ADA and MnDOT Standard Plans and Specifications.

The course is designed to provide local governments and consultant inspectors with a detailed understanding of the construction of accessible sidewalks, curb ramps, and signal systems. Training participants will be guided through MnDOT Special Provisions Prosecution of Work. ADA (1804), Curb Ramp Standard Plan 5-297.250, Sidewalk and Driveway Standard Plan 5-297.254, Accessible Pedestrian Signals, and best practices from MnDOT. Compliance documentation will also be covered during the class.

Please see the Minnesota LTAP website for registration and other details.

Brush up on your winter skills with Clear Roads online training modules

It’s never too late to brush up on your winter skills. One training option is the Clear Roads snowplow operator and supervisor training program, meant for both entry-level and experienced snowplow operators and supervisors. The training materials are available free of charge to any agency, including local and county highway departments.

The 22-module program covers equipment, materials, techniques, and procedures. A test question from the first module is shown at right (answer on page 7).

For access to the Clear Roads training materials, email Clear Roads administrator Greg Waydeley at greg.waydeley@ciscandassociates.com or call 608-490-0552.