

Road Business



Board Membership & Professional Development - A Win-Win!

By: Marilee (LaFond) Enus

I still remember my very first NH Public Works Association Board of Directors (BOD) meeting, just days after joining UNH T2 and the world of public works a few years ago. I'd made the leap from human resources in the technology industry into an exciting new opportunity with public works but was experiencing a case of "new-kid-nerve" in those early days. My head clouded by acronyms and an alphabet soup of public works professional groups -APWA, NHPWA, NHPWMA, NEAPWA, AASHTO – I wondered if I'd ever sort it out and make sense of "what's what" in public works. I've since had the incredible fortune of continuing participation with NHPWA BOD, as well as the NH Public Works Mutual Aid BOD, and additional work groups with AASHTO, NEAPWA, and other public works partnerships and associations. In fact, it is very likely through participation in these groups that I now "speak the language" of public works far more fluently than I imagined possible. The benefits of participating in a professional association Board do not stop there for me though, so I wanted to share a little bit about what I've gained with the hopes that you too will consider joining a Board or Subcommittee to support public works. Many of our local association boards, committees, and sub-groups are seeking new members, including with NHPWA, NHPWMA, and NEAPWA. Here are a few reasons I recommend YOU jump onboard a board...

Develop New Skills and Build Existing Ones

Participating on a Board allows you to leverage your existing skills to support and champion the industry, but also to gain new skills. Through Board and committee work you might plan a training event, develop a newsletter article, support research on a public works issue, support the budgeting and treasurer functions, develop advocacy and fundraising skills, or develop new marketing, administrative, and meeting facilitation skills, to name a few! If you're looking to gain experience in Business, Marketing, Project Management, or Leadership- look to a Board!

Expand Your Professional Network

The time spent at Board meetings, association events, and in other efforts will introduce you to new peers who support, inspire, and drive your industry. Through a broad network, you will gain new ideas, develop new skills, become aware of important topics in public works, and learn about new technologies that you can in turn share with your own team to improve performance and effectiveness. Board members share a mutual passion as champions, advocates, and supporters for Public Works!

Continued on page 5

Road Business is a quarterly publication. The editorial content, opinions, findings, and recommendations expressed in this newsletter do not necessarily reflect the views of our sponsors. To contact or subscribe, email us at t2.center@unh.edu, call 603-862-0030, or visit our website, www.t2.unh.edu.

Our Team

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Butch Leel, Senior Training Instructor

Kristen Parenteau, LTAP Program Coordinator

Scott Kinmond, Technical Specialist

Erin Bell, Ph.D., Principal Investigator

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Scott Kinmond - Public Works Director, Alton

NH Road Agents Association:

Rick Riendeau

NH Public Works Mutual Aid:

Caleb Dobbins - Representative for NHPWMA, Administrator, NHDOT, Division of Highway Maintenance

Member at Large/RPC Rep:

Vacant

About UNH T2 and NHLTAP

The UNH Technology Transfer Center fosters a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing knowledge of the transportation workforce and decision makers. As the site of the state's Local Technical Assistance Program, it works to enable local counties, cities and towns to improve their roads and bridges by supplying them with a variety of training programs, an information clearinghouse, new and existing technology updates, personalized technical assistance, training videos and materials, and newsletters. LTAP Centers nationally are able to provide local road departments with workforce development services; resources to enhance safety and security; solutions to environmental, congestion, capacity and other issues.

Hello from UNH T2!

It's that beautiful time of year again, the leaves in their gorgeous orange, red and golden hues falling from the trees. The crisp, fresh air and seeing the pumpkins on people's porches as you drive by those leaf covered back roads. You've got to love Autumn in NH!! We also see all of you out there working hard, cutting trees and removing brush, repairing our roads, being called out for wind storm emergencies and water main breaks and we want to say "Thank You" for keeping us safe! For making travel possible in NH so we can take in all of its beauty this season. For all your hard work and dedication! **We See You!**

As we start preparing for our next season - we know it's right around the corner when you'll have the plows out in the waking hours. In preparation for what's coming, we're excited to launch our NEW full-day in-person **SNOWFIGHTERS' SEMINAR**, to include topics such as preparing your teams & equipment for winter, and best practices & innovations in winter operations. We are adding new dates and locations to the calendar regularly- this has been a popular topic for registration, so save your seat soon!

We have lots of exciting, informative workshops happening for you this Fall, and are planning for a great 2022, including continuing virtual workshops throughout the winter months to be sure we stay in touch during snowfighting season! If there's a topic you'd like to see on the 2022 virtual or in-person calendar, or you're interested in *hosting a workshop*, please reach out! We're in planning mode, so it's never too early to chat about what would be helpful.

Check out our website calendar for upcoming sessions <https://t2.unh.edu/training-calendar>,

We hope you'll be able to join us for some of these exciting, information workshops!

Stay safe and healthy!
With gratitude, The UNH T2 Team

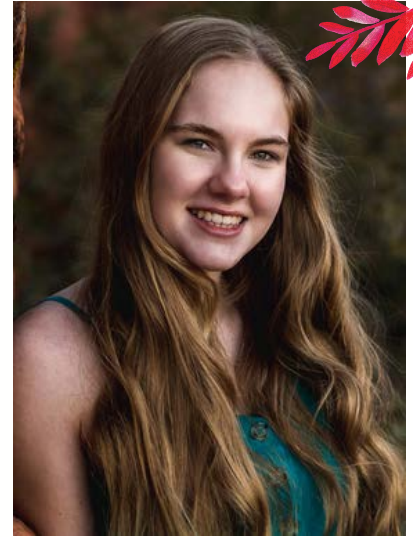


*We are so happy to introduce our newest
UNH T2 Team Members!*



Meet Kristen Parenteau!

Kristen brings 25 years of administrative and office management experience with her, she has been working in the UNH Civil and Environmental Engineering group for the past 7 yrs., currently as Sr. Administrative Assistant and Department Event Coordinator. Some of you may have met her at the UNH CEE Alumni Conferences or lectures in the past. She has also worked in the UNH Enterprise Computing & Telecommunication groups. Prior to working in CEE, she managed a non-profit dance studio. Kristen enjoys spending time with her family and her puppy Bailey. She loves the water, vacationing at the Cape and relaxing around fall campfires on the weekends. She is excited to be helping out the T2 Team and to learn more about the 'Public Works' side. She looks forward to meeting you and working with you in the future!



Meet Emily Abrusci!

Emily is a first-year student majoring in Environmental Conservation and Sustainability. She is a Changemaker Fellow as well as a member of the Idea and Innovation Society. Emily recently joined the T2 Team and also holds a position off-campus at Clarks American Bistro. She is amazed by all the opportunities here at UNH and excited for her next 4 years.

Meet Matt Miloro!

Matt is a Senior studying Civil Engineering. He has had an amazing experience completing his undergrad degree here at UNH. Matt joined the Technology Transfer (T2) Team as an office assistant and is completing the 3-D Printed Bridge Puzzle Project for the NHDOT. The project has been a great challenge and a perfect opportunity for Matt to expand his knowledge of civil engineering! Outside of work and academics, he is involved with the ASCE Student Chapter and Cru. In his free time you can find Matt out golfing, kayaking and hiking!



Meet Jamie Corr!

Jamie Corr is a first year student undeclared in COLA who plans on majoring in Communications. She has recently joined the T2 team and is loving it! In her free time she enjoys music and spending time getting to explore the campus. When she's not at T2 or classes, she spends much of her time getting involved in her sorority, Alpha Xi Delta.



Innovative Solutions to Roadway Slope Stabilization

Wed. December 8th - 8:00-9:30am



Evaluation, management, and maintenance of roadway slopes and embankments are critical steps in mitigating risk, supporting financial decisions, protecting public safety, and ensuring mobility, especially during natural disasters and times of crisis.

- What are the different types of slopes, and processes impacting them?
- What visible signs may indicate slope movement is occurring?
- What are some common and INNOVATIVE technologies and methods for stabilizing & repairing roadways with unstable slopes or landslides?

Presented by Dave Brogan P.E. with GeoStabilization International

[Register at t2.unh.edu](https://t2.unh.edu)

Technical NH Roads Scholar Hrs.

Improve Diversity in Thoughts and Perspectives

Many non-profit Boards have limited representation from the “under 40” crowd or are under-represented in other areas. Fresh ideas, new voices, and alternate viewpoints can help an association stay relevant – and valuable- to a broad audience in fast-changing times.

Add Your Voice to Important Issues

In addition to expanding your access to others’ perspectives, participating on Boards and Committees gives you an important opportunity to add your own voice to the dialogue. Lifelong learning is all about give-and-take; collaborating with others will introduce you to their perspectives while also allowing you to share your own. Whether it’s on issues impacting transportation, advocacy for public works needs, emerging technologies, or many other topics- spending time with others in your field will undoubtedly expose you to new information and perspectives, but also gives others an opportunity to learn from you! Board members also carry new information forward to their own teams and networks, facilitating ongoing transference of ideas and keeping transportation and public works moving in a forward direction.

Gain Confidence

For me, one of the greatest outcomes from participating on Boards and in subcommittees through my career has been the opportunity to gain confidence and grow my voice. Through working with different personalities, across organizations of varied scope and size, I’ve been able to not only share my perspective and ideas, but also learn to negotiate, communicate comfortably with people outside my immediate circle, and be confident in my contributions. The knowledge I’ve gained in these small groups, once a month on Zoom or in a conference room, is carried with me day in and day out, making me a more knowledgeable and effective contributor to my team, UNH T2, and the public works profession.

If you’re thinking about joining a Board of Directors, a subcommittee or workgroup, or similar, I’d be happy to chat with you about the available opportunities I’m aware of. Please reach out!
#PublicWorksMakesItHappen!



TOGETHER

Federal Highway Administration

LOCAL AID SUPPORT



Online Training

New online training available for transportation professionals:

- Safe Transportation for Every Pedestrian (STEP) for Local and Tribal Locations
- Geosynthetic Reinforced Soil – Integrated Bridge System (GRS-IBS)
- Gravel Roads Construction and Maintenance
- Construction Inspection of Rockeries
- Project Bundling

Courses provide anytime, anywhere access to hundreds of training topics designed to meet your individual transportation needs. Start your training today! Visit <http://bit.ly/CLAStraining>.



Build a Better Mousetrap

Build a Better Mousetrap (BABM) is a national recognition program celebrating the use of innovation in transportation. Innovations can range from the development of tools and equipment modifications to the implementation of new processes that increase safety, reduce cost, and improve efficiency of our transportation system.

Nominations are now open for the 2021 awards. Visit the BABM website at <http://bit.ly/CLASBABM> for entry details and to view innovations from previous years.



Coordinated Technology Implementation Program Publications

The Coordinated Technology Implementation Program (CTIP) provides innovative solutions for transportation program challenges. Increase your transportation knowledge and expertise in the areas of project development, maintenance, construction, geotechnical, unpaved road dust management, and traffic monitoring by visiting <http://bit.ly/CLASCTIP>.



Partnerships

To better serve the transportation community, FHWA has teamed up with various transportation partners to expand training options for transportation professionals.

Visit <http://bit.ly/CLASPartner> today.

Stay up to date on CLAS activities by subscribing to the e-Newsletter at this link:

https://public.govdelivery.com/accounts/USDOTFHWA/subscriber/new?topic_id=USDOTFHWA_153

View the most recent newsletter at this link:

https://www.fhwa.dot.gov/clas/training_tools/clas_newsletter_spring2021.aspx



U.S. Department of Transportation
Federal Highway Administration

Is your organization prepared for the new FMCSA ELDT rules?

JOIN US FOR A SPECIAL INTRO
SESSION WITH TIM WHITE

DECEMBER 1



NEW CMV LICENSING RULES TAKE EFFECT FEB 2022

Effective February 7, 2022, individuals seeking a commercial driver license in the State of New Hampshire will be required to complete theory and behind-the-wheel training as described in the Federal Motor Carrier Safety regulations (FMCSR's) Part 380.

This new requirement applies to CDL applicants:

- Obtaining a Class A or B CDL for the first time; or
- Upgrading an existing Class B CDL; or
- Obtaining a school bus (S), passenger (P), or hazardous materials (H) endorsement for the first time

In February 2022, applicants will be able to search for a training provider listed on the Training Provider Register to complete their required entry-level driver training. Only training providers who have registered with FMCSA will appear on this list.

When registering, training providers will be required to self-certify that they meet all the Federal requirements in the entry-level driver training (ELDT) regulations, as well as any applicable State requirements.

Training Provider Registry - <https://tpr.fmcsa.dot.gov/>

Training Provider Registration and Resource Materials - <https://tpr.fmcsa.dot.gov/Provider>

Frequently Asked Questions - <https://tpr.fmcsa.dot.gov/FAQ>

ELDT Training Minimum Federal Curricula Requirements - https://tpr.fmcsa.dot.gov/content/Resources/ELDT-Curriculum-Summary_508.pdf

If you have questions please email Tim White, State Programs Specialist at New Hampshire Division Federal Motor Carrier Safety Administration (United State Department of Transportation) at tim.white@dot.gov or call Tim at 603-856-4152

Preparing Your Organization and Workforce for Feb. 2022 ELDT Rules

December 1st - 8:00-9:30am



Join Tim White, Program Specialist with the Federal Motor Carrier Safety Administration (FMCSA) NH office for an overview of the Entry-Level Driver Training (ELDT) rules taking effect 2/7/2022.

- Driver requirements for classroom and behind-the-wheel training
- Training Provider Registry (TPR) and registration process
- Employing municipality or motor carrier requirements
- Documents submission and other records
- Q&A

This session is intended for public works directors & supervisors, administrators, human resources professionals, or others who hire CDL drivers.

Register at t2.unh.edu

BUILD A BETTER MOUSETRAP

Award Spotlights

WINNER

Jones County

Innovative Project Award



According to Jones County, Iowa, routine maintenance of shoulders on the paved system has always presented issues. The application of stone along the shoulders was a slow process, and the stone was not uniformly applied. Cleanup after shoulder stone application was time consuming and the equipment used for the application required a lot of maintenance. Jones County needed a new solution. "We are a secondary road department, similar to hundreds of others, and don't have the ability to purchase huge pieces of equipment," said Todd Postal with Jones County.

The department began its search for a solution by looking at the Iowa Department of Transportation's method of applying stone on their shoulders. According to Todd, "They use a device that requires them to change out the end gate on their dump trucks and place flutes in the dump box. We began sketching a prototype that eliminated the inefficiencies and constructed our device to use the existing dump box tailgate that's on all our trucks so it would be universal, and no dump box flutes would be required."

Jones County calls its attachment device the "Hopper." It is designed with sloped sides, a Teflon liner, and a vibrator to ensure material flows down the chute and onto the shoulder. It also has a fully adjustable plate to accommodate elevation differences from the hard-surfaced road to the shoulder. "We now have three of them that were developed in-house. The only challenge we faced developing the Hopper was keeping it level. The rest was pretty straightforward," said Todd.

Shoulder maintenance is a high priority for Jones County, with shoulder edge drop-off as a major safety issue. Using the Hopper devices will result in less material wasted and reduced labor and equipment costs, and will produce more lane miles covered and increase safety for residents. "Our advice to other agencies is to not be scared to try something new or different. Keep the communication open, bridge the gap, and eliminate the fears. Testing the product is key," said Todd.

Congratulations to Jones County as the FHWA 2021 BABM Innovative Project Award recipient.



© 2021 Jones County, Iowa

Jones County Secondary Roads

Todd Postal

(319) 462-3785

todd.postel@jonescountyiowa.gov

ROAD DIET

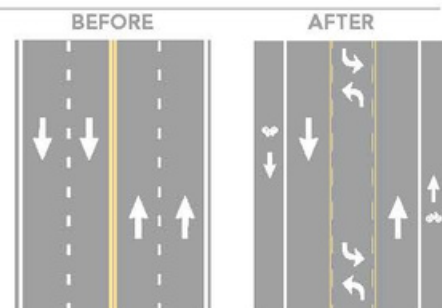


Safety | Livability | Low Cost

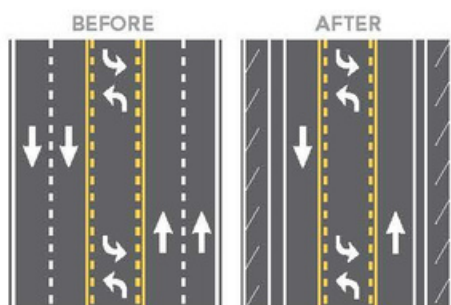
Road Diet FAQ

QA What is a Road Diet?

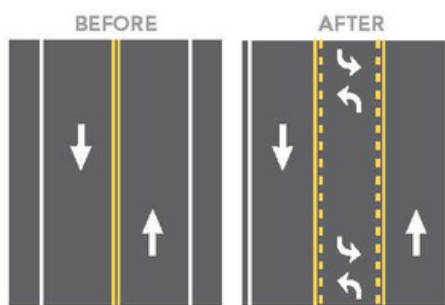
A Road Diet repositions pavement markings to better meet the needs of all road users. A classic Road Diet converts a four-lane undivided roadway to a three-lane roadway, but there are many other reconfigurations being used by States and locals. For example, a Road Diet could convert the roadway space from five to three lanes, two to three lanes, or vary lane of a three-lane roadway, as shown below. An agency could even use a Road Diet on a one-way street. For design guidance, see Chapter 4 of FHWA's [Road Diet Informational Guide](#).¹



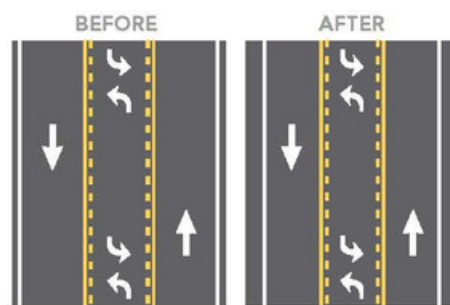
Classic Road Diet Conversion.



This five-lane to three-lane Road Diet removes lanes to allocate space for multipurpose use.



This two-lane to three-lane Road Diet reallocates shoulder width to add a TWLTL.



This three-lane to three-lane Road Diet narrows lanes to allocate space for wider shoulders.

QA How do Road Diets improve roadway safety?

A study conducted by the Federal Highway Administration (FHWA) found that four-lane to three-lane Road Diet conversions reduce the total number of crashes by 19 to 47 percent.² Several features of a Road Diet contribute to this safety improvement.

- **A reduction in the number of through lanes** can calm traffic, reduce weaving, reduce the number of lanes for pedestrians to cross, and reduce left-turn conflicts.
- **A two-way left-turn lane (TWLTL)** may reduce head-on crashes by dividing opposing traffic and reduce rear-end crashes by providing left-turning vehicles their own lane.
- **Wider shoulders** provide recovery room should drivers depart the travel way. They can also provide buses or mail trucks room to pull out of the travel lane, allowing vehicles to pass.
- **Pedestrian, Bicycle, and Transit Facilities** provide a dedicated space for these users, which can increase motorists' recognition that they are using the roadway. Dedicated bicycle/transit lanes and pedestrian refuge islands provide visible cues that can improve driver awareness.

¹ FHWA, Road Diet Informational Guide. FHWA Report No. FHWA-SA-14-028. Washington, D.C. 2014. Accessible at: http://safety.fhwa.dot.gov/road_diets/info_guide/.

² FHWA, Evaluation of Lane Reduction "Road Diet" Measures on Crashes. FHWA Report No. FHWA-HRT-10-053. Washington, D.C. 2010. Accessible at: <https://www.fhwa.dot.gov/publications/research/safety/10053/>.

QA What are the effects of Road Diets on emergency response services?

Multi-lane undivided roads can be problematic for emergency responders, as drivers may not be aware of protocols for allowing emergency vehicles to pass. Road Diets can significantly improve response times by allowing emergency vehicles to bypass traffic by using the center two-way left-turn lane. For examples of how Road Diets have positively affected emergency response times, check out FHWA's flyer on *Road Diets and Emergency Response: Friends, Not Foes*.⁸

QA How does a Road Diet affect businesses?

A Road Diet can improve economic vitality by changing the corridor from a place people "drive-through" to one that they "drive-to." Replacing vehicle travel lanes with on-street parking options, walking areas, and bicycle lanes can make the street a more attractive "park once" place. With these improved facilities, a motorist is more likely to park, walk around, shop, and enjoy the setting. For examples of how Road Diets have positively affected surrounding businesses, check out FHWA's flyer on *Road Diets' Economic Impacts*.⁹

QA What metrics can I use to evaluate a Road Diet?

Effective assessment of Road Diet operational, safety, and livability success can use a mixture of quantitative and qualitative metrics. The table below outlines commonly used metrics for evaluating the performance of a Road Diet. For more information about each of these evaluation metrics, check out FHWA's *Road Diet Informational Guide*.¹⁰ For examples of how agencies have used these metrics, see FHWA's flyer on *Road Diets Evaluation Metrics*.¹¹

Operational	Safety	Livability/Economic Development
Daily traffic counts	Travel speeds	Transit ridership
Peak hour traffic counts	Percent of drivers over the speed limit	Availability of on-street parking
Turning movement traffic counts	Percent of top-end speeders (Greater than 10 mph over speed limit)	Overall public satisfaction
Intersection queue lengths (main street and side street)	Crash frequency, type, severity, and rate	Property values
Travel times (vehicles)	Perceived level of safety	Resident/public feedback
Travel time (transit)		Business feedback/sales records
Adjacent street traffic counts and speeds		Number of new businesses/residences
Bicycle counts		
Pedestrian counts		

QA How do agencies incorporate Road Diets into design guidelines and policies?

Agencies incorporate Road Diets into their policies as both stand-alone documents and parts of existing agency plans and practices. Stand-alone policies add Road Diets to the agency's toolbox as a first-tier solution. Including Road Diets into a Strategic Highway Safety Plan, transportation planning process, or design guidance distinguishes it as a broader safety improvement strategy. Examples of how States have incorporated Road Diets into their guidance and policies are included in FHWA's brochure on *Road Diet Policies: Expanding Beyond a Single Implementation*.¹²

⁸ FHWA, "Road Diet and Emergency Response: Friends, Not Foes." FHWA-SA-17-020, Washington, D.C. 2016.

⁹ FHWA, "Road Diets' Economic Impacts." FHWA-SA-17-019, Washington, D.C. 2016.

¹⁰ FHWA, "Road Diet Informational Guide," FHWA-SA-14-028, Washington, D.C. 2014. Accessible at: http://safety.fhwa.dot.gov/road_diets/info_guide/

¹¹ FHWA, "Road Diet Evaluation Metrics," FHWA-SA-17-022, Washington, D.C. 2016.

¹² FHWA, *Road Diet Policies: Expanding Beyond a Single Implementation*, FHWA-SA-16-072. Washington, D.C. 2016. Accessible at: http://safety.fhwa.dot.gov/road_diets/resources/fhwasa16072/.



For more detail about each of these Road Diet features and examples of how agencies have implemented them, check out FHWA's [Road Diet Informational Guide](#)³ and [Road Diet Case Studies](#).⁴

Q A How do agencies select candidate Road Diet locations?

Whether interested in implementing Road Diets on a large scale or screening potential locations to yield one or two ideal sites, agencies can employ several methods to systemically identify candidate locations.

1. **Citing Road Diets as a strategy in safety plans**—including the Strategic Highway Safety Plan (SHSP), speed management plans, or bicycle and pedestrian plans—can lead to systemic identification and low-cost implementation.
2. **Evaluating all four-lane undivided roads** can help agencies identify an appropriate starting point by screening a subset of the entire network.
3. **Identifying multimodal expansion or connectivity needs** can lead to Road Diets as a strategy to accomplish the goals of safer and more-connected bicycle networks.
4. **Screening all upcoming resurfacing projects** allows an agency to incorporate Road Diets for virtually no cost.

For more detail about each of these methods and examples of how agencies have implemented them, check out FHWA's flyer on [Systemically Identifying Candidate Road Diet Locations](#).⁵

Q A What is the maximum traffic volume for a four-lane to three-lane Road Diet conversion?

Several agencies have developed guidelines for selecting candidate Road Diet locations to mitigate any negative effect on traffic operations. FHWA has summarized average daily traffic (ADT) volume threshold guidelines for four-lane roadways:

Less than 10,000 ADT: A great candidate for Road Diets in most instances. Capacity will most likely not be affected.

10,000-15,000 ADT: A good candidate for Road Diets in many instances. Agencies should conduct intersection analyses and consider signal retiming in conjunction with implementation.

15,000-20,000 ADT: A good candidate for Road Diets in some instances; however, capacity may be affected depending on conditions. Agencies should conduct a corridor analysis.

Greater than 20,000 ADT: Agencies should complete a feasibility study to determine whether the location is a good candidate. Some agencies have had success with Road Diets at higher traffic volumes.

For more information about a Road Diet's relationship to capacity, check out FHWA's Road Diet Myth Busters flyer titled [Myth: Road Diets Make Traffic Worse](#).⁶

Q A How much does a Road Diet cost?

Road Diets are much more economical than typical roadway expansions (e.g., right-of-way, asphalt, concrete, drainage modifications) because the primary expense is restriping the existing roadway. As a stand-alone project a Road Diet is relatively inexpensive, and agencies can reduce project costs even further by coupling Road Diets with regularly scheduled resurfacing. For more information about Road Diet costs, check out FHWA's flyer on [How Much does a Road Diet Cost?](#)⁷

3 FHWA, Road Diet Informational Guide. FHWA Report No. FHWA-SA-14-028. Washington, D.C. 2014. Accessible at: http://safety.fhwa.dot.gov/road-diets/info_guide/.

4 FHWA, Road Diet Case Studies. FHWA Report No. FHWA-SA-15-052. Washington, D.C. 2015. Accessible at: <http://safety.fhwa.dot.gov/road-diets/case-studies/>.

5 FHWA, Road Diet: Systemically Identifying Candidate Road Diet Locations. FHWA Report No. FHWA-SA-17-018. Washington, D.C. 2016.

6 FHWA, "Road Diet Myth Busters, Myth: Road Diets Make Traffic Worse," FHWA-SA-16-036, Washington, D.C. 2016. Accessible at: http://safety.fhwa.dot.gov/road-diets/resources/pdf/RoadDiet_MythBuster.pdf.

7 FHWA, "Road Diet: How Much Does a Road Diet Cost?" FHWA-SA-16-100, Washington, D.C. 2016.



New Hampshire, The Beautiful!

Local pictures are the best! We are so happy and thankful to have received some outstanding pictures of you making NH Beautiful. We are still looking for more submissions, and encourage you to show us your projects! Your photos could show up on our social media or our next Road Business edition!

Thank you! Send your pictures to Kristen.Parenteau@unh.edu



Wallace roundabout sidewalk configure - Aug, 2021
Picture: Adam Jacobs, Goffstown, PW



Pike Industries Paving Project in Newport
Picture: Lori Schinck, Newport PW

#PWpets



Got a PWpet? Send us pictures!
Tag us on Facebook with
[@UNHT2CenterLTAP](#) and [#PWpets](#)

CYBER SECURE?

It is 2:10 AM and you receive a call from one of your supervisors who is at the Public Works garage preparing to plow for a major snowstorm. They clicked on an email from a package delivery company asking for updated login credentials. After providing their existing username and password, the screen appeared to lock. The employee became concerned that they had fallen for a phishing attack when they were unable to close the email. You calmly instructed them to leave the device on and called your IT Director to explain. By 2:35, you are back in bed but can't seem to fall asleep. You try to assure yourself that everything will be fine but wonder if your organization is as safe as it could be when it comes to preventing a cyber-attack.

*By Cori J. Casey
Risk Management Consultant,
Primex3*

Working in the local government space today requires a basic knowledge of the cybersecurity landscape in which we operate. There are many threats – mostly external – that target us, ranging from foreign countries, criminal organizations, or even disgruntled former employees. The impact of this risk can lie anywhere between a minor annoyance and a catastrophic loss. While it is virtually impossible to eliminate all cyber security vulnerabilities, there are many steps you can take within your organization to prepare for and effectively mitigate this risk.

Phishing emails are a major cause of concern and are often the way cyber criminals access your network to initiate other types of attacks, such as ransomware or business email compromise. Attacks have become more sophisticated, and today's phishing emails are often cleverly written, well-designed, and appear legitimate. If an employee clicks on an attached file or link, or types in their username and password, the attack has already begun. One way to combat this is with Multi Factor Authentication (MFA), also known as two-factor authentication, which prevents cyber-criminals from accessing your network or systems with an employee's username and password. Without possessing the uniquely issued pin generated by a cell phone app or key fob, the login credentials become essentially useless allowing network access to only the intended user.

A great starting point is to consider implementing this strategy with your most vulnerable employees; these include organizational leaders, finance and human resource employees, and information technology staff. These employees present the highest risks because they typically have broad access throughout your organization's network and routinely work with sensitive and protected data. After a short time, this extra step will become the norm and you will have made your organization a harder target.

Business Email Compromise is the process by which an attacker obtains access to a business email account and acts as the original user to defraud the company, its employees, or partners. It is critical to understand the high quality of this impersonation, generally done for financial benefit. In addition to email, these attacks can be made or supported by the attacker calling via phone or even visiting in-person. Your organization must have procedures and protocols in place to guide employees through all high-dollar transactions and change-of-information requests. Secondary or supervisory approval of these types of transactions should be a must, and most importantly, personal verification through known and independently verified contact information. When receiving any of these financial requests, STOP and VERIFY before facilitating the transaction.

Continued next page



There are several additional cost-effective measures you can consider to better secure your organization:

- **Train your staff:** The threat landscape we face today is one that frequently targets employees. The attacks are ever evolving and increasingly sophisticated, so cyber security awareness training should be a regular facet of employee development. This is one of the most important recommendations.
- **Consider passphrases rather than passwords to improve organizational security:** Passphrases should be between 11-25 characters and include spaces. It only takes password cracking software approximately eight hours to decipher the average eight-character password, but it would take over 400 years to decipher a complex 11-character passphrase. Coordinate this process with your IT staff.
- **Back up your systems:** Meet regularly with your IT Director, staff, and/or Managed Service Provider and make sure off-site backups are saved daily, with verification of their existence weekly. These can be disabled or encrypted during a ransomware attack, and without verification you will likely never know until you attempt to restore your systems.
- **Consider using a .gov domain:** These domains are now managed by the federal government's Cybersecurity and Infrastructure Security Agency (CISA) and are free to local government entities. It will provide comfort to your citizens and those you communicate with that you are in fact a government entity and not a spoofed email or website. The .gov domain also provides you with additional email protections not available through publicly available domains.
- **Create an Incident Response Plan and Continuity of Operations Plan:** If your organization becomes the victim of a cyber-attack, you will have more peace of mind knowing you have these plans in place. Additionally, you can rely on these documents to help you act more quickly and potentially mitigate the impact of the attack. Be sure to regularly update and practice these plans.
- **Working in today's ever-changing cybersecurity climate requires ongoing vigilance.** Cyber attackers work around-the-clock to earn their share of this \$6 trillion dollar enterprise. Organizations with staff members who are proactive in their cyber security measures can reduce their risks and become less susceptible to attacks, while those who don't may lose sleep at night wondering if their organizations will be safe. Don't be an easy target.

Resources

Primex3 Member training resources: www.nhprimex.org

Government Finance Officers Association recommendations for internal controls of vendor payments:

<https://www.gfoa.org/materials/electronic-vendor-fraud>

Hive Systems password table: <https://www.hivesystems.io/password-table>

CISA.gov resources: <https://home.dotgov.gov/registration/#new-to-gov>



REGISTRATION OPEN!

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OUR NEW FULL-DAY

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Preparing your teams & equipment for winter.
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Several locations and dates!

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Interested in hosting? Marilee.Enus@unh.edu

Fall Newsletter Scramble

Unscramble the letters, write the word down and draw a line to connect it to the right statement.

Submit your entry to t2.center@unh.edu by 12/1/2021 for a chance to win a free workshop seat!

The FMCSA ELDT rules take effect during this 2022 month.

DROA IDET

Repositions pavement markings to better meet the needs of all road users.

NGIIHHSP

The ELDT rules will require individuals looking to obtain their CMV to take training from a provider in the Training Provider (BLANK)

SIAC

Manages gov domains

EVNIUQTIATTA

Along with Qualitative data, this is used in analyzing a potential Road Diet

PERHPO

How cyber criminals often access your network to enact attacks.

FEBRRAYU

Joining a Board can help in your career, including through increased (BLANK)

CEODICNFEN

Jones County, Iowa won the Build a Better Mousetrap Innovative Projects award for creating this...

TRESIYRG