

A PUBLICATION BY THE IDAHO ASSOCIATION OF HIGHWAY DISTRICTS

# IDAHO ROADS MAGAZINE



**IAHD**

IDAHO ASSOCIATION OF HIGHWAY DISTRICTS

**Speed Limits and  
Speed Zones**

---

**Open Meetings  
Checkup**

---

**Tire Issues and How  
to Avoid Them**

---

**Bridge Asset  
Management**

---

**Convention Edition 2021**



# Sign Solutions USA



SHOP OUR TOP QUALITY AND COMPLETELY CUSTOMIZABLE SIGNAGE!



## ABOUT SIGN SOLUTIONS USA

Sign Solutions USA is a 3M Certified Sign Fabricator that has been supplying cities, counties, and contractors the highest quality traffic signs for 50 years.

Whether you need a MUTCD sign, custom sign, or just some sign materials, Sign Solutions USA has a sales team here to help you.



Coming Soon – Our New Home

Request a quote by contacting us today or visit our website.

701.237.1255

sales@signsolutionsusa.com

www.signsolutionsusa.com

3M Certified Sign Fabricator

# MEET THE IDAHO ASSOCIATION OF HIGHWAY DISTRICTS



## EXECUTIVE COMMITTEE



**Kevin Renfrow**  
President  
South Latah Highway District



**Rick Robinson**  
Vice President  
Oakley Highway District



**Dave Burgess**  
2nd Vice President  
Twin Falls Highway District



**Monte Henderson**  
Board Chair  
Downey Swan Lake Highway District



**Rod Twete**  
Past President  
Lakes Highway District

## BOARD OF DIRECTORS



**Martin Beach**  
Mountain Home Highway District



**Graham Christenson**  
East Side Highway District



**Neal Gier**  
Buhl Highway District



**Bill Hartman**  
Notus Parma Highway District No. 2



**Heath Higley**  
Raft River Highway District

## BOARD OF DIRECTORS



**Joaquin Lowe**  
White Bird Highway District



**Dick Smith**  
Nampa Highway District



**Rick Youngblood**  
Canyon Highway District No. 4



**Nick Veldhouse**  
Executive Director



**Savannah Renslow**  
Communications Director

## IAHD STAFF

\* While every effort has been made to ensure the accuracy and reliability of the information provided in this publication, the Idaho Association of Highway Districts is not responsible for errors, omissions, or statements made by contributors and advertisers.

# first choice.

**W**hen you do business with Idaho Asphalt Supply, high-quality asphalt products manufactured to your exact specifications are only part of the story. Supported by our in-house AMRL-accredited labs and award-winning transportation and spreading companies, we lead the industry in quality, innovation and seamless one-stop-shop services.

We're a family-owned company and treat customers as part of our family. From our sales team to the lab, to production and management, our word is our bond. Our mission is to help you succeed - whether we are at your side in the field, optimizing our chemistry for project conditions, or sharing best practices for innovative treatments.

We strive to be your "First Choice."

**Idaho Asphalt  
Supply, Inc.** 

[www.idahoasphalt.com](http://www.idahoasphalt.com) | (800) 524-1679

# SPEED LIMITS AND SPEED ZONES

BY BRENT JENNINGS, P.E., JENNINGS CONSULTING, LLC



Have you ever been driving down the road, traveling the speed limit along with everyone else, and then suddenly the speed limit drops by 20 miles per hour to an unrealistic speed? You wonder, who in the world decided to reduce the speed limit and why? How are speed limits in Idaho set anyway?

## ESTABLISHING SPEED LIMITS

Speed limits are set by Idaho law, specifically Idaho Statue 49-654. Where no special hazard or conditions exists that requires a driver to lower their speed to fit conditions, such as weather or condition of the roadway, the maximum speed limit for various types of roadways are:

TYPE OF ROADWAY	MAXIMUM SPEED PER I.C. 49-654
Residential – Urban – Business Districts	35 mph
Local Rural Roadways Outside of Residential – Urban – Business Districts	55 mph
State Highways	65 mph
Interstate Highways	75 mph (65 mph for trucks)
Interstate Highways (Urban)	65 mph

These are the maximum speed limits automatically set by statute, and in fact, the speed limit does not have to be posted. However, speed limits are posted to remind motorists of the maximum speed limits.

It is important to recognize that when a special hazard or condition exists, Idaho Statute 49-654 states that vehicle operators shall not "... drive a vehicle at a speed greater than is reasonable and prudent under the conditions and having regard to the actual and potential hazards then existing." This includes approaching and crossing intersections, rail grade crossings, going around curves,

approaching hilly terrain, traveling on narrow and winding highways, and when special hazards exist with respect to pedestrians or other types of traffic. This special condition is known as "Basic Rule" and drivers can be cited for violating Basic Rule even though they are driving below the allowed maximum speed limit.

But wait a minute, there are sections of highways that are posted higher than the maximum speed limit established in Idaho Statute 49-654 (See above table). How can this be?

### CHANGING ESTABLISHED SPEED LIMITS

Diving deeper, Idaho Statute 49-207 reveals that when local highway authorities, in their respective jurisdictions (both on local highways and state highways that run through their jurisdiction) have a desire to change the maximum speed limit established by Idaho Statute 49-654, the opportunity exists to do so provided the proposed speed limit **change is based on a traffic engineering study that is managed by a professional engineer licensed in the State of Idaho.**

When an engineering study to change the speed limit is completed the potential maximum speed limits become:

TYPE OF ROADWAY	MAXIMUM SPEED PER I.C. 49-654	MAX SPEED WITH ENGINEERING STUDY PER I.C. 49-207
Residential – Urban – Business Districts	35 mph	35 mph or lower
Local Rural Roadways Outside of Residential – Urban – Business Districts	55 mph	70 mph
State Highways	65 mph	70 mph
Interstate Highways (Non-Urban)	75 mph (65 mph for trucks)	80 mph (70 mph for trucks)
Interstate Highways (Urban)	65 mph	N/A

Therefore, the absolute maximum speed limit with an engineering study is 80 mph for Interstates (70 mph for trucks) and 70 mph for state and local rural highways. As a result of all this, it is important to recognize that changes made to speed limits automatically established by Idaho statute cannot be done arbitrarily but must be accomplished through a traffic investigation and engineering study under the management of professional engineer licensed in Idaho.

The Manual on Uniform Traffic Control Devices (MUTCD) is adopted by the Idaho legislature. Both Idaho statute and the MUTCD requires a traffic investigation and an engineering

**DURABLEND<sup>®</sup>**  
Dust Suppression

Improved Road Quality, Environmentally Friendly

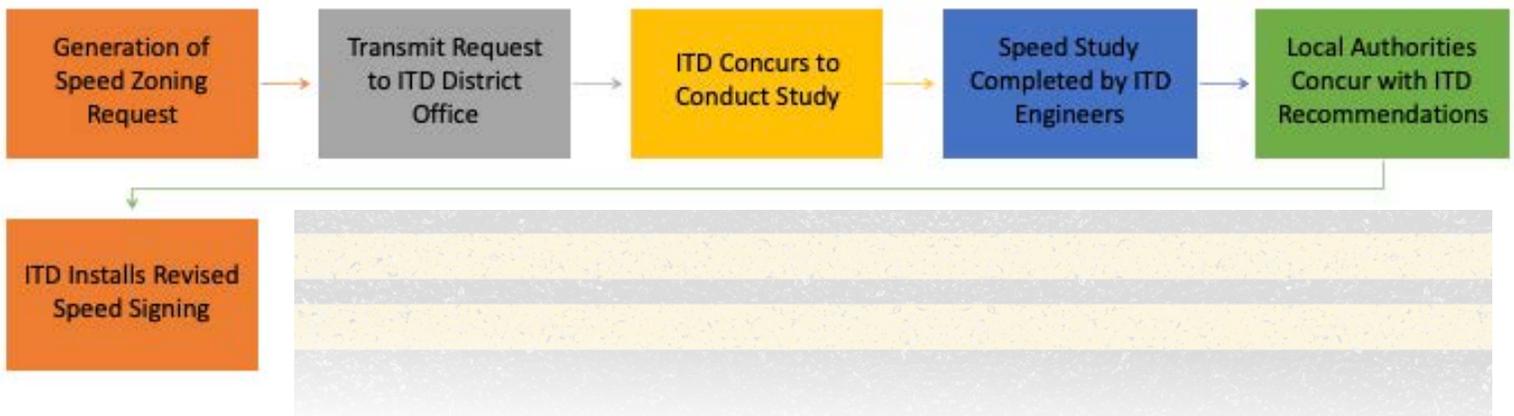
EnviroTechServices.com 1-800-369-3878



study if speed limits are changed beyond those automatically established by Idaho statute. The Local Highway Technical Assistance Council (LHTAC) partnered with the Idaho Board of Professional Engineers to allow local agencies to collect speed data and write a speed limit recommendation report. The report generated is transmitted to LHTAC engineers and if LHTAC engineers concur with the recommended changes presented by the local agency, then speed limits can be legally changed. This process has the potential to save local agencies money by allowing the local agency to perform most of the speed study work themselves.

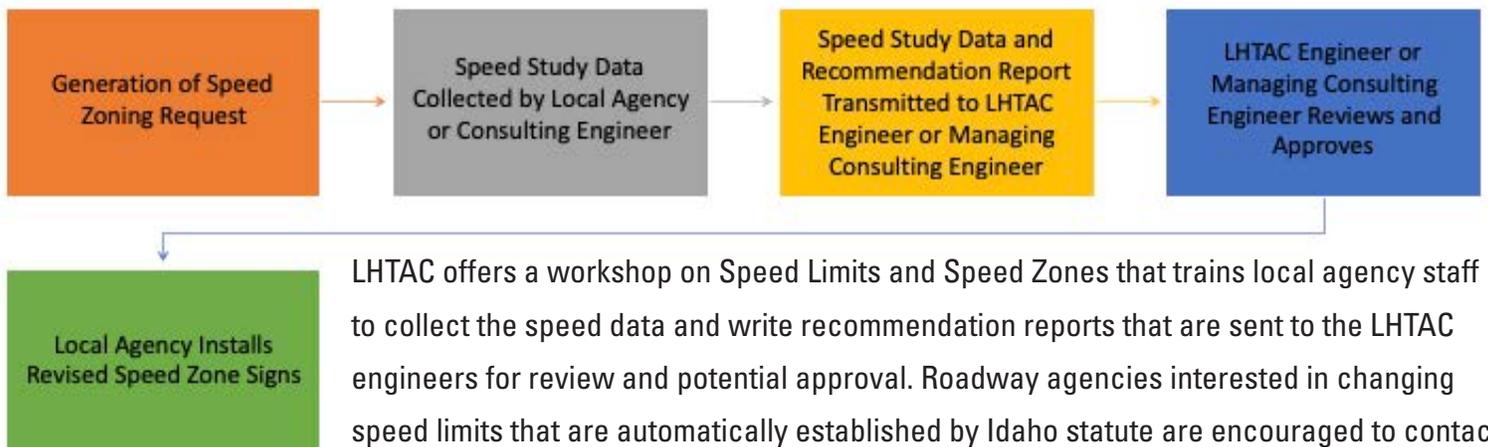
### PROCESS FOR CHANGING ESTABLISHED SPEED LIMITS ON STATE HIGHWAYS WITHIN THE LOCAL JURISDICTION

The process for local road agencies to change speed limits on a state highway running through their jurisdiction is:



### PROCESS FOR CHANGING ESTABLISHED SPEED LIMITS ON LOCAL HIGHWAYS WITHIN THE LOCAL JURISDICTION

For roadways owned and operated by local road agencies, the process to change speed limits is:



LHTAC offers a workshop on Speed Limits and Speed Zones that trains local agency staff to collect the speed data and write recommendation reports that are sent to the LHTAC engineers for review and potential approval. Roadway agencies interested in changing speed limits that are automatically established by Idaho statute are encouraged to contact LHTAC for more information and assistance in planning and implementing effective speed zones that are set in accordance with Idaho Law.

**STRONG  
FOUNDATIONS.  
STRONG  
FUTURE.**



For 140 years, Ash Grove has provided portland and masonry cements to construct highways, bridges, commercial and industrial complexes, single and multi-family homes, and other important structures fundamental to America's economic vitality and quality of life.

We also use cement-treated base (CTB) and concrete recycled asphalt base (CRABS) in our work throughout Idaho. Ash Grove is proud to be members of and support the Idaho Association of Highway Districts.

Contact us at **801-263-3011** or [ashgrove.com](http://ashgrove.com)



**GRANULAR  
DEICERS**

GMCO's premier granular products are all-natural, environmentally friendly and specifically engineered for the toughest winter conditions.



**DUST  
CONTROL**

Our all-natural and long lasting IntegriBlend product line will provide the dust suppression and soil stabilization you are looking for



**LIQUID  
DEICERS**

Specified by Departments of Transportation, our Torch liquid deicers are safe and effective anti-icing and de-icing liquids.

**TORCH<sup>CI</sup>**

Contains enhanced inhibitors, making a more stable product and allowing the product to keep a high concentration of chlorides.



**FREEZEGUARD  
CI+**

Base magnesium chloride with inhibitors



1 (800) 244-2148  
[WWW.GMCOCORP.COM](http://WWW.GMCOCORP.COM)



HONESTY.  
INTEGRITY. COMMITMENT.

# OPEN MEETINGS CHECKUP

BY BRIAN KANE, CHIEF DEPUTY ATTORNEY GENERAL, STATE OF IDAHO



Over the past two years we have seen our society evolve. Work from home and remote meetings, which were once the exception, have become the norm. This evolution has also impacted how Idaho's governments at all levels conduct their business.

You are probably all familiar with the Idaho Open Meetings Law (Idaho Code Chapter 2, Title 74), and rely upon it frequently. But that familiarity, and perhaps lack of recent familiarity, may be leading to shortcuts that place your organization's compliance with the Open Meetings Law in jeopardy. This brief article will highlight a few recurring issues that have popped up during the pandemic in order to give your organization an Open Meetings tune-up!

## AGENDAS & NOTICES

Idaho Code §74-204 requires that a notice and agenda be provided for each meeting. Within these requirements, three spots seem to consistently cause headaches for boards. First, the need to timely post the agenda at both the physical location of the governmental entity (or the physical place of meeting if there is no governmental headquarters) and on the Internet if the entity has an

online presence (website, Twitter, Facebook, etc.) is a consistent source of complaints. Some entities may have created a website, but no longer maintain it. Or they have migrated to another web presence without shutting down their old one. Similarly, entities may have created a Twitter, Instagram, or Facebook page, but then don't maintain it. The challenge is that the law likely requires that meeting notices and agendas be posted to these online locations and failure to do so could open an entity up to an open meetings law challenge.

Second, some entities simply forget to post in both places. This is a good time to ensure that your organization has a checklist or a system to ensure that this posting requirement is consistently met. And third, if your organization is holding a meeting that is accessible via telephone or videoconferencing

platform (e.g. ZOOM, GoToMeeting, Teams, etc.), ensure that you are posting the access number, link to join the meeting, or any other information that is required to ensure the public can attend and observe your meeting. Be sure to double-check those numbers and links as well. Our office has seen a number of complaints based upon a single character being left off of a link or number, making it impossible for the public to join.

## REMOTE MEETINGS

Remote meetings are permitted under the Open Meetings Law with specific requirements. Idaho Code § 74-203(5) permits meetings to be held using telecommunications devices. But the Open Meetings Law does not permit a meeting to be held entirely remotely. **Under the law:**

at least one (1) member of the governing body, or the director of the public agency, or the chief administrative officer of the public agency shall be physically present at the location designated in the meeting notice, as required under section 74-204, Idaho Code, to ensure that the public may attend such meeting in person.

Idaho Code § 74-203. During the pandemic, this provision was briefly suspended by the Governor by executive order. That order has long since expired, but this office continues to receive inquiries and complaints about remote-only meetings. To comply with the Open Meetings Law, there must be a designated physical location for the meeting that will allow citizens who do not want to attend remotely to attend in-person. Also, at least one board member, executive director, or chief administrative officer must be in attendance in-person at the physical meeting location and must be in the same room as the public attendees. A separate meeting room may be used to accommodate overflow attendance, but cannot be used as the primary physical meeting location. Advanced planning and alternate meeting locations are encouraged to avoid the need for overflow meeting rooms separate from the



board member(s), executive director, or chief administrative officer attending the meeting in-person.

## SEPARATE THE OPEN MEETINGS ISSUES FROM GENERAL MEETINGS ISSUES

I often refer to the Open Meetings Law as the public's ticket to the show of government. This means the public has the right to observe, but not necessarily participate in a meeting. Although a board may include a public comment or open forum on their agenda, that is not a requirement under the Open Meetings Law. Some other more specific statutes outside of Chapter 2, Title 74 may have a requirement for a "public hearing," or "public comments," with regard to specific types of government decisions, but those are requirements of those specific statutes—not the Open Meetings Law. If your board does have an open forum portion on your agenda, it is essential that the board remain consistent in its application of the forum. For example, if everyone is provided with 5 minutes to speak, make sure that everyone has the same time limit. If there is a limit to the number of speakers in an open forum, ensure that limit is included within your meeting notice and the public is informed as to how to sign up. One of the most common complaints that our office receives is that these rules of the meeting are either not provided to the public, or not followed consistently.

Although this is not an open meetings violation, it may be a violation of other statutes requiring public comment for certain proceedings, and complaints such as these can seriously undermine the confidence that the public has in your board's decisions.

Similarly, it is important to discuss and understand how your meetings will be run. Although not provided for within the Open Meetings Law, boards routinely struggle with issues such as parliamentary procedure, do all motions require a second, can the board chair make a motion, who can present and when, who may ask questions and other conduct of the meeting issues. It is worthwhile for board's to undergo training in the rules of parliamentary procedure so that the board can understand how it conducts its meetings, but also in order to explain to the public why the



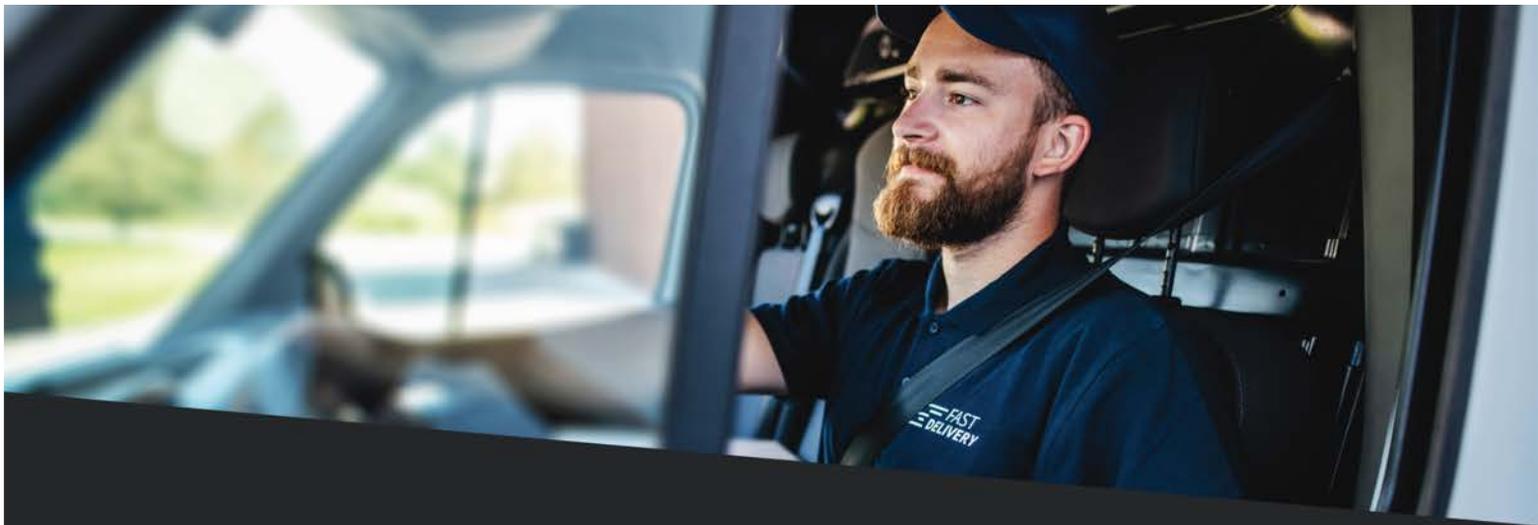
board is acting in the way that it is acting. Whatever meeting procedures are adopted by the board, consistent application is of the utmost importance.

Within the pandemic, this issue became critical because boards that had virtually no one in their audience were caught completely off-guard by enormous crowds often interested in a single topic on their agenda. This all serves as an excellent reminder to plan ahead for how your meeting will be conducted. This does not mean substantive topics should be discussed outside of a public meeting because a substantive discussion of topics would violate the Open Meetings Law. Instead, this is a reminder

to go over how your meeting will be run, does the room you hold your meetings in have a capacity, is there a topic on your agenda that will generate higher than normal interest, if someone has to be removed from the room because of conduct, who will do it? If your board is expecting a large crowd, you may want to reach out to local law enforcement to make them aware of the meeting, consider an alternate meeting location, as well as to determine if there are any steps that you can take to preserve order. Similarly, if the board's meeting room has a small capacity that cannot accommodate all attendees, it is recommended that an alternate location be considered or remote access to the meeting be provided. Both capacity limits and remote access alternatives should be provided for within the board's notice and agenda. These are all questions that should be discussed.

## CONSISTENCY, TRANSPARENCY, & THE OPEN MEETINGS LAW

One of the best pieces of advice that can be offered is to insure consistency within your meetings. A high functioning board understands the Open Meetings Law and parliamentary procedure. It understands how to run an efficient well-organized meeting, including use of all technologies to be utilized, and does so consistently. The public does not like to be surprised—whether it is a last minute agenda item, a preferred speaker, or an early termination of a public forum. Notice to the public and consistency in application will breathe a great deal of public confidence into a board's activities. A hallmark of humanity is that in the absence of information, we tend to fill in the gaps with negative inferences. The Open Meetings Law provides a direct response to this tendency by shining the light of transparency upon government activities. Embracing this notion will foster confidence in the actions of your board!



# SAVE TIME AND MONEY WITH COMMERCIAL TIRE FLEET MANAGEMENT

COMMERCIAL TIRE UTILIZES THE BRIDGESTONE BANDAG FLEET ANALYZER TOOL TO PROVIDE TIMELY, CUSTOMIZABLE REPORTS ON YOUR FLEET. EACH REPORT ALERTS YOU TO POTENTIAL TIRE PROBLEMS BEFORE THEY HAPPEN—REDUCING DOWNTIME AND PREVENTING ROAD EMERGENCIES.



## IN-SERVICE TIRE INSPECTION

Bluetooth-enabled tire pressure gauges and tread depth indicators allow each fleet manager to get an immediate view of the fleet from every yard check report—and allow your reps to make personalized, data-driven recommendations.



## OUT-OF-SERVICE TIRE ANALYSIS

Every tire tells a story. Get detailed analysis from each tire removed from service to identify cost savings opportunities and solve potential problems.



## PERFORMANCE TRACKING

Find the best performing tire for each tire position and vehicle, with detailed tread wear comparison and cost per mile reports.

**GET STARTED TODAY!**

**COMMERCIALTIRE.COM (208) 888-8800**



Employee Owned & Operated



# PUTTING YOUR TIRES TO WORK FOR YOU! COMMON TIRE ISSUES AND HOW TO AVOID THEM!

BY CHRIS PARKS, GOVERNMENT SALES, COMMERCIAL TIRE



Fifteen plus years in this business, and throughout them all, I have seen every kind of fleet management situation you can think of. From the good, to the bad, to the in-between, there are a couple of common tire issues that transcend through them all. With a little insight and some good help, you can save a lot of downtime and expense in your fleet management efforts.

**Irregular tire pressure is one of the leading causes of tire failure in fleets across the nation.**

In addition to causing tire failure, mismatched air pressure in both dual and single wheel applications causes significant abnormalities in tire wear, reduced fuel economy, vehicle handling issues, and can pose a significant safety threat for drivers in your fleet.

Misapplication (the wrong tire for the job!) is another common issue Commercial Tire often sees in fleets. Often, premature tire wear and failure are caused by simply not having the correct tire installed for the job the equipment

is doing. From dump trucks, to backhoes, to pickup trucks and passenger cars, there is a correct tire suited to the type of work each vehicle or piece of equipment is doing. Many fleets cause themselves a significant expense every year by purchasing the wrong tires for the job.

As a fleet manager, to avoid misapplication issues, you must first have a solid understanding of the areas in which your equipment operates. You should make your

In addition to causing tire failure, mismatched air pressure in both dual and single wheel applications causes significant abnormalities in tire wear, reduced fuel economy, vehicle handling issues, and can pose a significant safety threat for drivers in your fleet.

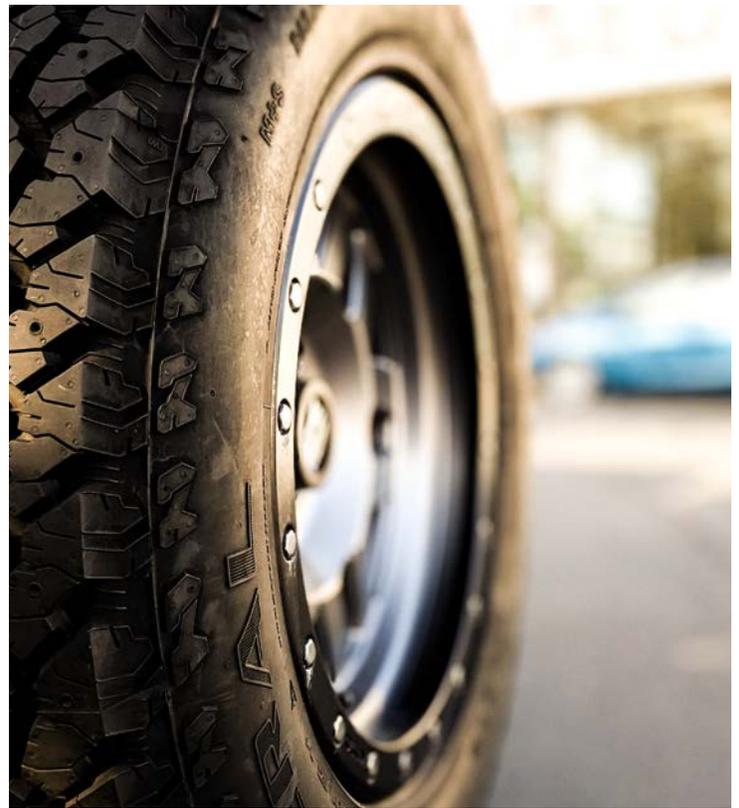
Misapplication (the wrong tire for the job!) is another common issue Commercial Tire often sees in fleets. Often, premature tire wear and failure are caused by simply not having the correct tire installed for the job the equipment is doing. From dump trucks, to backhoes, to pickup trucks and passenger cars, there is a correct tire suited to the type of work each vehicle or piece of equipment is doing. Many fleets cause themselves a significant expense every year by purchasing the wrong tires for the job.

As a fleet manager, to avoid misapplication issues, you must first have a solid understanding of the areas in which your equipment operates. You should make your tire purchases utilizing that knowledge and the recommendations of your tire supplier as it corresponds to that information.

**When managing air pressure there are, of course, very basic ways it can be done. Thumping tires and a simple pressure gauge are both very common.**

Here at Commercial Tire, we solve tire pressure issues for our customers and provide total fleet tire management using Bridgestone's Fleet Analyzer Tool. As a dealer and proud partner of both Bridgestone and Firestone, Commercial Tire not only offers the right tires for the job at set government contract pricing but is also able to provide you detailed reports on your fleet's tire needs at the time of inspection.

Our serviceman will enter your fleet's vehicle wheel



position layout, preferred air pressure, and equipment number into a template provided by an app on either their cell phone, iPad, or laptop. The Bridgestone Fleet Analyzer tool then connects via Bluetooth to the device. Once connected, our serviceman inspects both tread depth and air pressure. This information is communicated to the application, and at the end of the fleet inspection, an in-depth report is created and emailed to your fleet manager for review in PDF format.

Bringing awareness to these common issues, and as a result, better management of your fleet, should not only help you save significant expense on tires themselves, but also on other equipment expenses that may arise because of poor tire management.

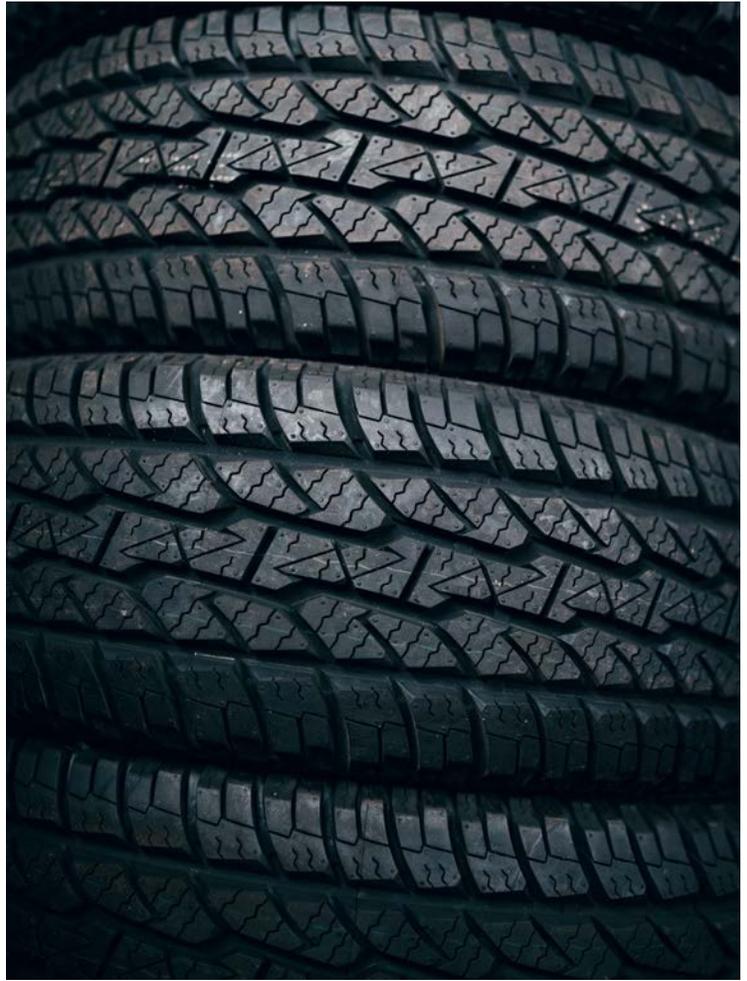
About Commercial Tire: Commercial Tire provides tires and complete auto care for consumer and commercial vehicles of every shape and size, with locations across Idaho, Washington, Oregon, and Utah.

Founded in 1968 by Bob Schwenkfelder, Effective as of Nov. 1, 2019 and rolled out to employees in 2020, Commercial Tire joined the ranks of other ESOP companies in Idaho including Winco, Franklin Building Supply, and Clif Bar. An ESOP creates an employee

retirement trust for a privately-owned company that holds all company stock. Employees accrue this stock over time as a benefit, effectively transferring ownership.

Shifting to an ESOP framework has been shown to significantly improve job stability and business performance—benefiting employees, customers, and communities. Research and surveys conducted by the nonprofit National Center for Employee Ownership (NCEO) found that ESOP participants have 2.2 times as much in retirement plans and 20% more financial assets overall compared to non-ESOP companies.

“We know this move will enhance our ability to recruit and retain great people—now employee-owners—to our growing company. In turn, the service we provide to our customers will only get even better,” Schwenkfelder adds. “As a historically family-run company, it feels like the real change we made is welcoming a whole lot of great people to the extended family.”



## FORSGREN *Associates Inc.*

Engineering Stronger Communities

- Surveying
- Roadway Design
- Transportation Studies
- Bridge Design
- Bridge Inspection
- Construction Management
- Construction Testing
- Grant Funding



# Is Your County Still Running *Steel* Grader Blades?

**Steel Blades: Cheaper Up Front, Far More Expensive Down The Road...**

**Changing Motor Grader Blades Costs Money and Downtime of Equipment!**

## *Problem Solved!!*

# KÜPER®

Master Distributor North America  
for all Kueper Plow Blade Products  
Sharq P300 and  
Kennemetal Grader Blades and Systems

Kueper North America LLC  
171 Church Street, Suite 300  
Charleston, SC 29401

Bob Stowe  
Northwest Rep  
541-861-0287  
rdstowe@kueperblades.com

Distributed by:

# **NORSTAR** **INDUSTRIES, INC.**

Tracey Kelly  
(253) 735-1881  
Sales@NorstarInd.com



### Dual-Carbide Blades

### Outlast standard steel 20:1

AS tested by SC DOT.



### Scarifier Blades

Carbide-Tipped Cutting Tools,  
Blocks, and Accessories for  
Scarifier Blade Systems

Improved Braze, More Wear-  
Resistant Steel Body

# KENNAMETAL®



# Sharq™

### Long Life, Easily Adjustable Motor Grader Scarifier Systems for Dirt Road Maintenance



### Kueper<sup>XT</sup> Armored Carbide Insert Snowplow Blade

High quality  
Kennametal  
tungsten carbide  
and consistent brazing  
technology armored  
with unique TASSCO high  
performance steel ensures top  
performance and longevity up to 2.25  
times that of normal carbide blades.

# AGENCY PAVEMENT MAINTENANCE: BUDGET OPTIMIZATION

BY RICK LABELLE, ASPHALT SYSTEMS INC. ® (ASI)



In the pavement world, an ounce of prevention is worth a ton of cure –yet budgeting for that ounce is a heavy task. Variables can seem endless and beyond your control: a council or commission that changes personnel nearly every election cycle; funds that are frequently raided by other departments; weather-related emergencies; limited supplier availability...and so on. Fortunately, there are methods to help paddle through the stream of obstacles.

Webster defines budget as, “the amount of money you have available to spend after covering expenses, for a particular purpose.” It’s important to define the purpose. Based on the Kendall Curve (to the right) and decades of supporting data, it is as much as ten times cheaper to preserve pavement than to replace it.



## STRETCHING BUDGET DOLLARS

A worthy goal is to increase pavement quality by effectively maintaining as many miles of road as possible with minimum expenditure per year; i.e., stretch your dollars by utilizing the right quality treatment at the right time, on the right road.

Here are some key considerations:

1. Total number of miles to treat annually –create “zones” within your Agency
2. Condition(PCI) ratings of each street (terrific 3rd party options exist for this)
3. Budget
4. Understanding and mastering the key metric: Cost Per Square Yard (not “per ton”) Per Year of Treatment Life (cheapest does not equal best)
5. Selecting the right treatment for the right road, at the right time

While specific costs vary based on location and suppliers, the “\$” in the columns below represents general figures, intended for a simple comparison. The clear takeaway is this: cost per square yard/per year of treatment life increases significantly with each escalation of necessary pavement treatment.

It is much more affordable to utilize less expensive treatments earlier and more frequently on your agency pavements, than to allow deterioration to dictate more substantial and expensive treatments later. This is the key to stretching your fixed budget dollars, while simultaneously improving PCI numbers and mitigating asphalt deterioration.

Treatment Type	Expected Service Life	Cost Per Square Yard	= Cost Per Sq. Yd/Per Year of Treatment Life
Fogseal	3-5 years	\$	\$
Sand Seal	4-7 years	\$\$	\$\$
Chip Seal	6-8 years	\$\$\$\$	\$\$\$\$
Micro Seal	6-8 years	\$\$\$\$	\$\$\$\$
Cape Seal (chip+slurry)	7-10 years	\$\$\$\$\$\$	\$\$\$\$\$\$
HMA/New Pavement	10-20 years	\$\$\$\$\$\$\$\$\$\$	\$\$\$\$\$\$\$\$\$\$

## YOU ARE NOT ALONE

Taking your Agency’s pavement maintenance budgeting a step further, it’s helpful to also realize you’re not alone. There are roughly 8.5 million lane miles of roads in the U.S., and 5.5 million miles of those are paved. Shockingly to some, about 3/4 of that pavement (4 million miles) falls within county & city jurisdiction (i.e., not state & federal).

While exact counts vary, there are roughly 3,200 counties and 18,000 cities or townships in the United States. That’s a network of experience worth utilizing through state and regional Public Works Associations, Highway Districts, County Road Superintendent and Engineer groups. There are literally thousands of others who have dealt with situations similar to yours, so be bold and ask what has worked for them – you’ll likely also hear what hasn’t worked.

## GUIDELINES

Some guidelines gleaned from successful Agencies over the years include:

### 1. Plan ahead

- At least 1 year, but ideally have a 3-5 year outline in place.

### 2. Keep your “pavement maintenance” budget irrefutably separate from your “equipment” budget

- Need a new snowplow? That’s important, but it’s a separate budget line item that should not impact your pavement maintenance budget.

### 3. Be confident and pro-active with your council/commission

- You’ve been hired to be a pavement preservation authority. Show them your 3-5 year plan - with current pavement PCI ratings, proposed treatments, information on each, costs per square yard & treatment lifespans.

### 4. Show your council/commission that you’ve done homework and have a plan –then show them it worked

- Document roads and treatments with before/during/after photos & videos of each; take pictures from the same place every year for 3+ years to give a clear snapshot.

### 5. Budgeting & planning phases will get easier with each subsequent year as you continue to prove competence

- Your council/commission will ultimately ask you what you need -a great position to be in.



TRAFFIC SAFETY  
SUPPLY COMPANY



**The finest in intelligent  
warning devices for  
Idaho's roadways**

Traffic Safety Supply Company

800.547.8518 | [sales@tssco.com](mailto:sales@tssco.com) | [tssco.com](http://tssco.com)



# WESTERN STATES CAT OFFERS TRAINING

A skilled, knowledgeable team of operators is the key to success of any project. At Western States Cat we know the value of instructor-led training on everything from machine operation to safety best practices. Our Caterpillar-certified instructors are ready to lead your crew in customized trainings tailored to fit your needs.



## TRAINING TOPICS CAN INCLUDE:

- ▶ **SAFETY:** Whether you're looking for machine, jobsite or personnel safety training, our instructors are ready to equip your crew with the knowledge and skills they need to help make sure everyone stays safe on the jobsite.
- ▶ **OPERATOR:** On-machine operator training is our most popular topic. From operation techniques to jobsite applications, our operator trainings are customized to be relevant to your fleet and jobsite.
- ▶ **FLEET MANAGEMENT & MAINTENANCE:** Preventative maintenance, fuel management, and machine wear and tear all contribute to the overall health and productivity of your fleet. Our instructors provide onsite trainings to help your team learn best practices for keeping your machines up and running on the job.
- ▶ **CUSTOMIZE IT:** Don't see what you're looking for? We're flexible and ready to help, whatever your training needs may be.

**Give us a call to talk about how our training team can work with you to create a customized course to meet the needs of your organization.**

Whether you're looking to train a new team of operators, learn the latest about fleet management or develop hands-on training for something unique to your application, our team is ready to talk to you about the training that's right for your group.

**800-852-2287** | [WesternStatesCat.com/governmentaltraining](http://WesternStatesCat.com/governmentaltraining)



Scan this code to request training.

**WE'RE READY WHEN YOU ARE.**

**WESTERN STATES**

**CAT**

**800-852-2287**  
[www.WesternStatesCat.com](http://www.WesternStatesCat.com)

# THE FUTURE OF FLEET MANAGEMENT

The influence of technology as it relates to the heavy equipment industry is undeniable, even to the point that many technology advancements are now included straight from the OEM. Disruptive influences now become standard options, which can lead to more material moved with greater accuracy and less effort. Who would have thought that flying a drone to measure material movement could also add to a machine's total life cycle? As players in the growing landscape to offer the needed resources and information to achieve the efficiencies we are all striving for, Western States Equipment Company is vested in the success of the industries we serve.

While technology takes human performance to greater heights, the assets also need to be at peak performance. Many of the decisions made in the past to keep an asset running will not suffice today as additional sensors, tolerances and algorithms demand a different approach. The benefit to adapting many of today's new management technologies is efficiency: we no longer have to be physically present on the machine to be able to understand what is happening and predict what will happen in terms of productivity and maintenance over the course of its lifetime. However, on the other hand we now also have to know how a PPPC hydraulic system works along with pulse width sensors, software files and communication channels such as CANBUSS or J1939.

The introduction of technology adds another layer to the already complex landscape of our industry. To properly manage and facilitate the growing production dynamics we must also address machine health. We are now expected to diagnose, predict and analyze data in addition to the responsibilities of keeping a fleet moving. Understanding how machine data is generated and transmitted, as well as interpreting that data for a variety of audiences, has become an important aspect of the role of a fleet manager. The scenario of needing to understand software and networking along with asset environmental impacts is critical to the success of the next generation of site comprehension.

If you have already developed a robust and inclusive PM program you may be head of the curve. Enabling your people and processes to adapt to the changing equipment and environment will facilitate different approaches to stay ahead of certain failures. Items such as a pragmatic inspection program and detailed work order history can prove invaluable when trending failures and focus areas. These are starting points for gaining additional understanding and insights to your fleet and are benchmarks for performance. As you start to introduce technologies, you can trend performance, focus on what needs attention, and make necessary adjustments before they have a negative impact.

The not-so-distant future of technology in our industry includes vast advancements in autonomous vehicles and safer operations. The bridge between now and then is being created with production technologies already in place in many day-to-day operations. Our job as Fleet Managers is to ensure that assets are available to meet those increasing needs. The days of being able to ignore an indication of failure are waning, thus the need for more advanced health technologies in combination with an increased focus on prevention of failures.

# TERMINATIONS — CLASSIC MISTAKES TO AVOID

BY TAMMY MIDDLETON, HR RISK MANAGER, ICRMP



Idaho is an “employment-at-will” state. Does that mean you can fire anyone at any time without a problem? Of course not. The reality is that no termination is without risk. There are still several laws that regulate terminations. And, even if the termination is justified, you may still get sued. So, to help reduce the risk of litigation, I want to encourage you to pause and give consideration to the following:

If you are feeling frustrated or like you have had enough, chances are you may be reacting emotionally.

Avoid snap decisions and confrontations. Give yourself a moment to consult with experts: ICRMP, peers, or your attorney.

Ask yourself, will my employee be surprised they are getting fired? If so, then termination may not be the appropriate next step. Employees should never really be completely blindsided by a termination. They should be receiving regular feedback on their performance

and behaviors. You should be coaching them on ways to improve, expectations and consequences. If this has been happening, they might be upset, but they shouldn't be surprised. Coaching and disciplinary action prior to termination tell the story of how we got here to the court. If you go from hire to fire with nothing in between, it creates questions like “why now?”, and “what else might be motivating this?”



Keep in mind, it's not always about what you have done, but what you can prove that you have done, so look at what you have in writing. Does your documentation support your termination action today?

Are you following your own rules? More and more cases are being lost because employers don't follow their own rules and policies. If you have a "for cause" policy, then you need to follow it. If your handbook says that you will provide a verbal warning, then you need to do that. If your policy states you will hold a name clearing hearing, insure that happens before you move forward. Failure to follow your own policy, can look like discrimination, retaliation, or a hostile work environment, and will distract from valid reasons to terminate an employee.

Be mindful of what you say. Both the day of termination and the weeks prior to. Any promises you make, or

statements that could be construed as discriminatory, threatening, or retaliatory will be remembered in the worst possible way. While you don't want to say things that may be taken wrong, you also don't want to be overly nice. If the employee is being terminated for poor work product, don't start complimenting them on their great attendance or telling them how fun they are to work with, it will make the termination seem like a betrayal. Nothing inspires litigation like being blindsided. Also, don't discuss the termination with anyone who doesn't need to know. It's important to be respectful to employees, even if they are leaving the agency. No one wants to feel talked about or like they are the last to know about their own termination. Things like this inspire employees to sue. Before you have the final conversation, do your homework. Review the last 6-8 months of the employee's tenure. Have they made any complaints? Have they reported any wrongdoing? Have they filed for FMLA, ADA, or had a workplace injury? Employees frequently believe that their termination is because of retaliation. If the employee has engaged in any of these activities, it is important to proceed with caution, and consult your attorney or call ICRMP.

## TIPS ON THE FINAL CONVERSATION

Now that you are down to the final conversation, keep it simple. This should be a 10-15 minute conversation.

1. State the reason for the termination. Don't give a laundry list of everything the employee had done wrong for the last 10 years. Just the trigger event.
2. Ask the employee if they need anything from their workspace to leave immediately. If so, go retrieve it. Do not allow the employee back into the workspace, or to have access to work computers or files.
3. If the employee wants to argue or debate the facts, just inform them that the decision has been made.
4. Don't apologize for terminating them. Remember, you coached them and warned them, it is their decision that they are at the table.
5. Have all of the appropriate paperwork ready at the meeting, including a copy of the termination notice, any supporting documentation, insurance and benefits information, final paycheck, if possible, and information on who to contact with questions, where to pick up personal items after the fact, or drop off agency property.



You can help reduce litigation risk by being professional, kind, and letting the person leave with dignity. Here is a checklist to get you started:

#### TERMINATION/DISCIPLINE CHECKLIST

- Is the employee at-will or subject to an employment contract or collective bargaining agreement?
- For cities—is the employee an appointed official?
- Is the employee a member of a protected class?
- For counties and libraries—who does the employee work for?
- Has the employee recently received a favorable evaluation or have documented record of solid performance?
- Does the employer have documentation of performance issues of the employee, and that the employee has knowledge of those issues?
- Is the employee being treated differently than others have been treated in similar situations?
- Has the employee ever disclosed requested an accommodation for disability?
- Has the employee requested FMLA or paid or unpaid sick leave?
- Is the discipline or termination related to attendance problems that are possibly tied to an illness or possible medical/mental condition?
- Has the employee suffered an on-the-job injury or otherwise brought a worker's compensation claim?
- Has the employee brought a complaint, or participated as a witness in an investigation, of possible policy or legal violation against the member (either formally or informally) or alleging harassment, discrimination, hostile work environment or retaliation.
- Will the employee be surprised by the termination?

IA4D

# THANK YOU LOYAL PARTNERS



When the road is rough, you know who to call.



THE LANGDON GROUP  
a J-U-B Company



GATEWAY MAPPING INC.  
a J-U-B Company

OTHER J-U-B COMPANIES



## Northwest Equipment Sales, Inc.

*Your Truck and Trailer Connection Since 1981*

[www.nwesales.com](http://www.nwesales.com)



SALES • PARTS • SERVICE • LEASING • RENTAL

Boise, Idaho • Twin Falls, Idaho • Hermiston, Oregon • Burbank, Washington

# PAVING A BRIGHTER FUTURE



In 2017, the Idaho Association of Highway Districts incorporated the IAHD Scholarship Fund as a charitable non-profit in Idaho. The IAHD Scholarship Fund is a merit-based scholarship designed to help high-achieving students from predominately underserved rural communities attend college or a vocational school.



In 2021, the Fund awarded \$17,000 worth of scholarships, to deserving students throughout the state. However, this could not be achieved without the generosity of our donors and membership alike! Many thanks go to all who have kindly supported the IAHD Scholarship Fund to support students on their academic endeavors!



## WHO'S ELIGIBLE?

- Children and grandchildren of highway district commissioners and employees
- Students with cumulative 2.5 GPA or higher
- Students enrolled in a 1 - 4-year Idaho institution
- Part-time or full-time students

**2022 – 2023 ACADEMIC SCHOLARSHIPS APPLICATION PERIOD  
JANUARY 1 – MARCH 31, 2022**

Students must meet the eligibility requirements, apply, and complete a questionnaire to be considered for the scholarship.

**Learn more about the IAHD Scholarship Fund and  
how to apply by visiting our website at [IAHD.com](http://IAHD.com)**

# THANK YOU 2021 DONORS AND SPONSORS FOR SUPPORTING THE IAHD SCHOLARSHIP FUND



# THANK YOU!

- Bonnie Smazal
- Bonny Flagg
- Buhl Highway District
- Downey Swan Lake Highway District
- Raft River Highway District

# ADDICTION AND THE FAMILY: RECOVERY BEGINS WITH YOU

BY STEPHEN ODOM, PHD, FOUNDER & CHIEF OFFICER, FIRST RESPONDER WELLNESS AND SHIFT WELLNESS



According to a Columbia University study, “40 million Americans ages 12 and over meet the clinical criteria for addiction involving nicotine, alcohol or other drugs.” It is estimated that each chemically dependent person directly affects at least four others. The math suggests that an astonishing 160 million Americans are directly affected by addiction. When a family member suffers from an addiction, their family and friends suffer too. Family and individual functioning are inevitably altered by the chemically dependent person.

His or her relationship to the mood-altering chemical gradually builds walls that neither the family’s love nor logic can penetrate until he or she receives treatment. The effects on the family are often experienced as anxiety, depression, guilt, anger, and even resentment. Often there is “helicoptering” or detective behaviors that go on because we believe that by knowing the who, what, when, where and how, we can stop the problem. The answers to these questions may never be answered, and they do not stop the addiction, but the ability of the family to play an instrumental part in an addict’s recovery is possible.

Unknowingly, however, family members can become enablers of the problem. Their genuine compassion for their loved one can cloud their judgment and prevent

them from setting limits and boundaries that the addict desperately needs. Family members can experience many emotions with regards to the addiction and their loved one; sadness, anger, feeling they are to blame, and becoming judgmental. Moreover, the walls, emotions, and behaviors do not instantly dissolve when abstinence begins and often persist during and after treatment. Learning to trust, forgive and navigate a new course that includes healthy limits often requires professional guidance and support for the family, too. Where does one start? Identifying the fact that a loved one needs help and seeking education on the developmental processes of addiction is the first step in helping a loved one struggling with an addiction. While the recovery process is an individual journey, the family members are along for the ride, whether they choose to



be or not. To assist in this journey, there are resources available that can help educate family and friends of addicts and help them to understand the disease, including, Al-Anon for alcohol abuse, and Nar-Anon for narcotic abuse.

Additionally, families must learn about the different treatment options available to help their loved one understand their choices. There are inpatient (residential) facilities and outpatient services, as well as various treatment offerings to meet the individual needs of the client. Even with the family's support, however, the addict may not be willing to go to treatment. In many cases, an intervention is warranted. An intervention is a process where family members, with the help of a professional interventionist, confront the individual about their addiction and the damage it is causing themselves and their family and friends. In many cases, an intervention can, and does lead the person to treatment.

Can the family still be involved when the addict is admitted into treatment? Research shows that family support during the recovery process is paramount for effective treatment and reduces the chances of a relapse by 20%. It also reduces despair, hopelessness, and conflicts that are linked to the recovery process. Family members can be supportive during treatment

through family therapy and open discussions. Together they can work to change old habits, form new behaviors and family cultures to eliminate the client's desire for drugs or alcohol. Family therapy also educates the family on behaviors associated with substance abuse and mental disorders and on the medical and psychological effects they are likely to encounter with their loved one throughout treatment and thereafter. It is normal for family members to have adapted to the addictive behavior of their loved one as a coping mechanism before treatment. During treatment however, the family is advised on practical strategies such as support groups, and the enabling behaviors that they should avoid. Families that have lived with addiction have probably experienced damaging emotional and relational consequences. Addiction does not discriminate.

## **PARENTS, SPOUSES, PARTNERS, SIBLINGS, AND CHILDREN ARE ALL AFFECTED BY THE DOWNWARD SPIRAL OF ADDICTION.**

Therefore, the family member's thoughts, emotions, and behaviors that came about because of the dependency, need to be surfaced, treated, and healed. The family, through specialized support, will learn to balance taking care of themselves and taking care of their loved one.

Motivation is another fundamental element of the treatment process where the family can play a vital role in supporting the client. It's important for the family to work together during this process and be a unified front. During times of low motivation for the client, family involvement is particularly useful as it can boost the client's commitment. As well, family support enhances compliance to medication management and



overall engagement throughout the recovery process. What happens after treatment? After completing treatment, the client moves into the maintenance stage. Family members in this juncture play a significant role in the rehabilitation process by providing support and a safe environment, and most importantly, by taking care of themselves, and not becoming the “sobriety monitor.” The family should provide encouragement and compassion that can help their loved one feel supported and understood. Family can be an instrumental part of each step of the recovery process from getting a loved one into treatment, being a support system to them during treatment, and providing a safe haven for when they return home. By working together — the addict, the treatment team, and the family — recovery is possible for everyone.

*Dr. Stephen Odom, PhD is a 30-year first responder and healthcare behavioral health expert. He partners with III-A to provide behavioral health and wellness services to our members. For more information about Dr. Odom and the work he does, visit [www.firstresponder-wellness.com](http://www.firstresponder-wellness.com) and [www.shiftwellness.com](http://www.shiftwellness.com)*



Shared Strength · Trusted Care

- ✓ Enhanced, progressive benefits for Idaho public employees.
- ✓ 24/7 accessibility by a live person.
- ✓ Controlled costs for our Agencies by self-funding our benefit plans.
- ✓ Reduced and stabilized costs of employee benefits for all Agencies.

[iii-a.org](http://iii-a.org)



**T·O ENGINEERS**



**THE CHOICE, BY DESIGN**

[www.to-engineers.com](http://www.to-engineers.com)

IDAHO | UTAH | WASHINGTON | WYOMING

Graphic Designer | Print Coordinator



Do You need Help with Print Material or Design Layout?

Piper Design is the sweet frosting on the content cupcake that will help your customers understand the message. Your business design is important, it shouldn't be boring.

**piper turpen 208.841.9412**

# 2021 IDAHO ROADS – LRI PORTAL & RECENT ADVANCEMENTS

BY GREGORY WALLINGFORD, GIS ANALYST II/ LOCAL ROAD INVENTORY COORDINATOR, ITD



Your Safety • Your Mobility  
Your Economic Opportunity

## Local Road Inventory Portal



ITD LRI Workflow Manager



Local Road Inventory Dashboard



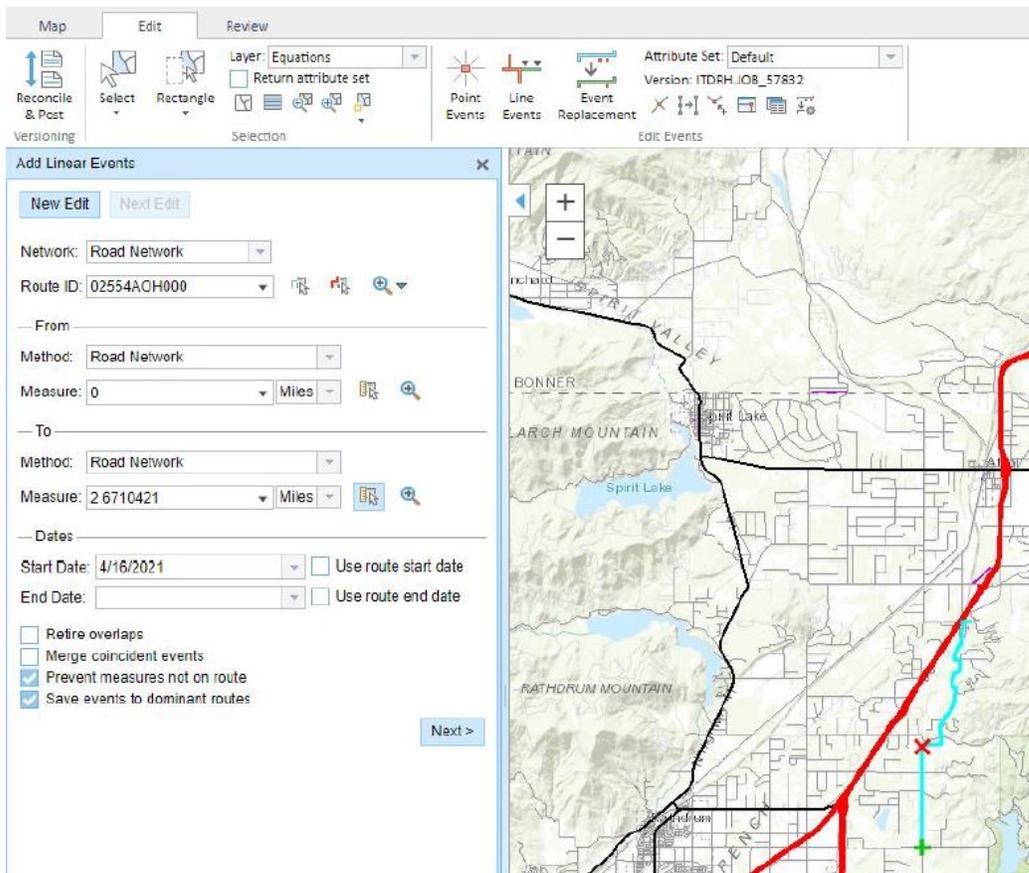
LRI Changes Dashboard

The Local Road Inventory (LRI) program plays a crucial role in supporting rural and local roads which drive Idaho's economic prosperity. By providing access to endless recreational opportunities as well as thousands of farms and other small businesses, the local roads throughout this state play a key role in strong growth and accumulating wealth- esto perpetua.

Ensuring equitable distribution of state tax-dollars for the maintenance and improvement of local roads is of utmost importance to us here at the Idaho Transportation Department (ITD). Several different actors work at ITD to complete this process. From updating our geospatial data, to reviewing motor-vehicle registration numbers and population figures, lots of work is done to ensure dollars are properly calculated for your utilization. The following article will cover a brief history of the LRI program, the LRI portal recently deployed by ITD, and the areas I hope to improve upon in the next few years.

Management of the LRI program has shifted between the Local Highway Technical Assistance Council (LHTAC) and

ITD throughout its history. However, the statutes and codes defining the LRI have not changed, so the general spirit and purpose remains intact regardless of whom is in charge of LRI coordination. Technology advancements over the past several years have allowed the geospatial information systems (GIS) section at ITD to deploy a computer based linear referencing system (LRS). This switch has paved the way for better data transparency and access through web-based maps, apps, and dashboards. Since the time that ITD started managing the LRI program again in late-2012, modernization to the LRS required recalculating mileage for all roads in the state. This new length calculation is



be marked online and pushed to the database in 1-2 weeks' time (versus 2-3 months for paper-based updating). It is important to note that support for paper-based maps used to complete annual updating will remain an option in perpetuity. Without any user credentials, the portal displays links for either current LRI data or changes from the past few years. The LRI portal exists at this location online: <https://gis-portalp.itd.idaho.gov/xportal/home/index.html>

The LRI program serves a crucial role in driving economic activity throughout Idaho. Ensuring that

called geo-mileage and represents the most accurate and precise approach available for a computer based, state-wide mapping system. Having all these resources operating, means we can set up automated workflows so that data owners can directly input information as desired in a controlled editing environment, which prevents conflicting edits or accidental deletions.

The most recent advancement in the LRI program is our newly deployed LRI portal. Built into that portal is a workflow manager that powers the editing site where annual updates can now be communicated. The editing webpage provides all the expected capability of a normal map on the internet (base map options, zooming, bookmarks, etc.), except this system provides editor tracking and conflict prevention to improve transparency and reliability of the LRI as an authoritative data source. Using the new LRI portal to communicate updates significantly reduces the turn-around time for seeing the changes in our database. Instead of going through the arduous process of printing, mailing, marking, mailing again, unpacking, and editing; the changes can

roadways have adequate grading and drainage means we can all rely on having safe and reliable access to the places we need to get. While the purpose of the LRI will not change, there are efficiency improvements I'd like to make. The first being to continue bringing more highway district into the LRI portal site for communicating annual updates. The second item is in regards to field work procedures, and working to ensure that all ITD District analysts throughout the state perform field work in a consistent manner. Long-term we'd like to have dashboards showing an estimation of dollars per mile, or miles changed per-year, along with other year-to-year comparisons so that any interested party can identify where tax-dollars are being spent on roadways improvements. None of this works without y'all though. I have lots of ideas about how to make the program work, but it would be foolish of me to not request your input on what we can do better.

*If you have any ideas or suggestions in regards to GIS data and the LRI program, please don't hesitate to let me know, my e-mail is [greg.wallingford@itd.idaho.gov](mailto:greg.wallingford@itd.idaho.gov), or my cell-phone number is (208)-510-7672/ office-phone (208)334-8613, I look forwards to hearing from you and appreciate your taking the time to read this!*

# BUSINESS UNUSUAL

BUSINESS SERVICES

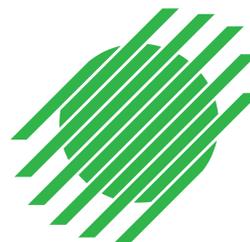


At most financial institutions your business is just a number.  
At Idaho Central Credit Union, you're a partner.

Welcome to Business Unusual. We're here to help you plan your future, manage your cash flow, and grow your business with a full suite of business services, including:

- Business Checking, Loans, and Cash Management Services
- Online Banking and Business Bill Pay
- Commercial Real Estate and more

Visit [iccu.com](http://iccu.com) for more information.



**Idaho  
Central**  
CREDIT UNION



# IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

COMPLETES 2017 STORM WATER CONSTRUCTION GENERAL PERMIT TRANSFER FROM U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

BY KARISSA NELSON, P.E., ENVIRONMENTAL STAFF ENGINEER, LHTAC

The Idaho Department of Environmental Quality (DEQ) completed the hand off from the U.S. Environmental Protection Agency (EPA) for regulatory responsibilities for the permitting and enforcement of 2017 Storm Water Construction General Permit on July 1st of this year. This was the final transfer of authority for the National Discharge Pollutant Discharge Elimination System (NPDES) to the Idaho Discharge Pollutant Elimination System (IPDES). DEQ is now responsible for permitting, compliance, inspections, and enforcement of discharge permits into Idaho wetlands waterways from construction storm water activities.

If your project is located on Tribal Lands (reservations) you will still be permitted through EPA <https://cdx.epa.gov/>

## WHEN IS COVERAGE UNDER THE STORM WATER CONSTRUCTION GENERAL PERMIT NEEDED?

1. If construction is greater than one acre
2. There is a potential to discharge to a wetland or water of the U.S.

## NO PERMIT NEEDED IF LESS THAN ONE ACRE OF DISTURBANCE

### ROADWAY MAINTENANCE IS EXEMPT

Roadway maintenance that maintains the original line and grade (grading, resurfacing, cleaning ditches), hydraulic capacity (replacing a culvert in-kind), or maintains the original purpose of the site is EXEMPT from this permit. Changes to a roadway such as widening or culvert up-sizing are NOT exempt.

### WHAT HAS CHANGED?

Although the DEQ is still operating under the EPA 2017 Construction General Permit, there are some changes with

how this permit will function.

### CHANGES:

- Name change from IPDES instead of NPDES
- New permit application process
  - o The IPDES permitting can be found here: <http://www2.deq.idaho.gov/water/IPDES/Account/Login>
  - o Each Operator (Contractor and Owner) needs to file their OWN permit Notice of Intent (NOI).
- DEQ assesses fees, EPA did not. These application and annual fees are used to fund the program:

Project Size	Application	Annual
1-10 Acres	\$200	\$0
10-50 Acres	\$400	\$75
50-100 Acres	\$750	\$100
100-500 Acres	\$1,000	\$400
>500 Acres	\$1,250	\$400
Low Erosivity Waiver	\$125	\$0



- DEQ plans to inspect 10% of all projects each year.
- DEQ is drafting their own permit to replace the 2017 Construction General Permit, their new permit will be in effect in March of 2022. The DEQ draft permit is likely to include additional requirements, such as pH monitoring.

#### TIPS and TRICKS

- If the link for payment is not functioning, go here instead: [CLICK HERE](#)
- Issues with the IPDES System?  
Email Shanda Lowder at [DEQ.Shanda.Lowder@deq.idaho.gov](mailto:DEQ.Shanda.Lowder@deq.idaho.gov) She is very responsive and helpful.

#### Have Questions?

Contact: Karissa Nelson, P.E.  
Environmental, Staff Engineer  
Local Highway Technical Assistance Council  
Office: (208)344-0565  
Cell: (208)841-2153  
[www.LHTAC.org](http://www.LHTAC.org)

**TVPIPE**  
**SUPPLY**

Caldwell, ID  
2416 E. Chicago St.  
208-459-7531

Idaho Falls, ID  
1345 Chaffin Ln.  
208-233-2214

Twin Falls, ID  
1790 Kimberly Rd.  
208-733-4188

# BRIDGE PRESERVATION, REHABILITATION, AND REPLACEMENT

BY SCOTT WOOD, P.E., FEDERAL-AID ENGINEER, LHTAC & AMANDA LAMOTT, P.E., SAFETY TAP ENGINEER, LHTAC



Bridges are one of the most expensive assets on the transportation system. In order to prolong the life of Idaho bridges, it is important that our good bridges remain in good condition, repairs are done promptly, and replacements occur when the bridge exceeds its design life and can no longer safely handle the traveling public. With limited funding available for bridge replacement, a balanced approach prioritizing bridge preservation is necessary, and a “worst-first” approach focusing on the bridge assets in the worst condition is not always best.

Think of a bridge as an asset to invest in overtime similar to regular maintenance of your vehicle. To keep a vehicle running smoothly, routine maintenance such as changing the oil, rotating the tires, and washing it when dirty is necessary. Actively applying intentional, small investments over time keeps your asset in good shape in the long run.

years old or older. Currently, 966 of Idaho’s 2,474 local bridges are over 50 years old. With limited funding to replace deficient bridges across the state, bridge preservation and maintenance is critical in maintaining our bridge assets. Proper preservation, maintenance, and repair of bridges in good to fair condition is an important part of bridge asset management and to the local road connectivity across the state.

**49%**  
Will be 50 years  
or older in 5 years

Today, bridges have a 75-year design life; however, prior to the early 2000’s, bridges were designed with a 50-year design life. Within 5 years, nearly half of Idaho’s local bridges will be 50

## **BRIDGE PRESERVATION AND MAINTENANCE**

Bridge preservation activities are actions or strategies that prevent, delay, or reduce deterioration of bridges and bridge elements. This keeps bridges in good to fair

condition and extends the service life with little cost. Proper maintenance will restore a deteriorated bridge to a functional state.

**ROUTINE MAINTENANCE** occurs as a result of an event, season, or activity. Examples of this include litter removal, snow removal, asphalt patch, accident damage, or storm damage. This work requires regular occurring attention. This should be performed as needed based on visual inspection.

**CYCLICAL MAINTENANCE** is performed at pre-determined intervals that will preserve and delay deterioration. Bridge cleaning, every year, will slow the deterioration of concrete and steel components and extend the life of the bridge. Some other examples of regular cyclical maintenance include joint cleaning, flushing drains, and sealing asphalt or concrete cracks. This maintenance will help prevent moisture from seeping through cracks and oxidizing steel in the deck and girders. Bridge inspectors will often report cracks and other issues that may need repair in the notes section of the bridge inspection report; however, a visual inspection performed by maintenance crews on a cyclical basis can identify most of these issues earlier.

**CONDITION-BASED MAINTENANCE** is the process of repairing or replacing certain bridge components in response to a known defect. These repair conditions are typically determined during the inspection process. Examples of this include joint replacement, deck overlays, patch/repair substructure elements, and scour repair/countermeasures. Road and bridge crews may be able to perform some of the repairs; however, some maintenance activities may require a contractor with experience and specialized equipment to do the work.

**BRIDGE REHABILITATION** projects provide nearly complete restoration of a bridge to a good to fair condition. These types of projects require significant

engineering design, long construction schedules, and considerable cost. Examples include deck replacement, girder replacement, and substructure strengthening.

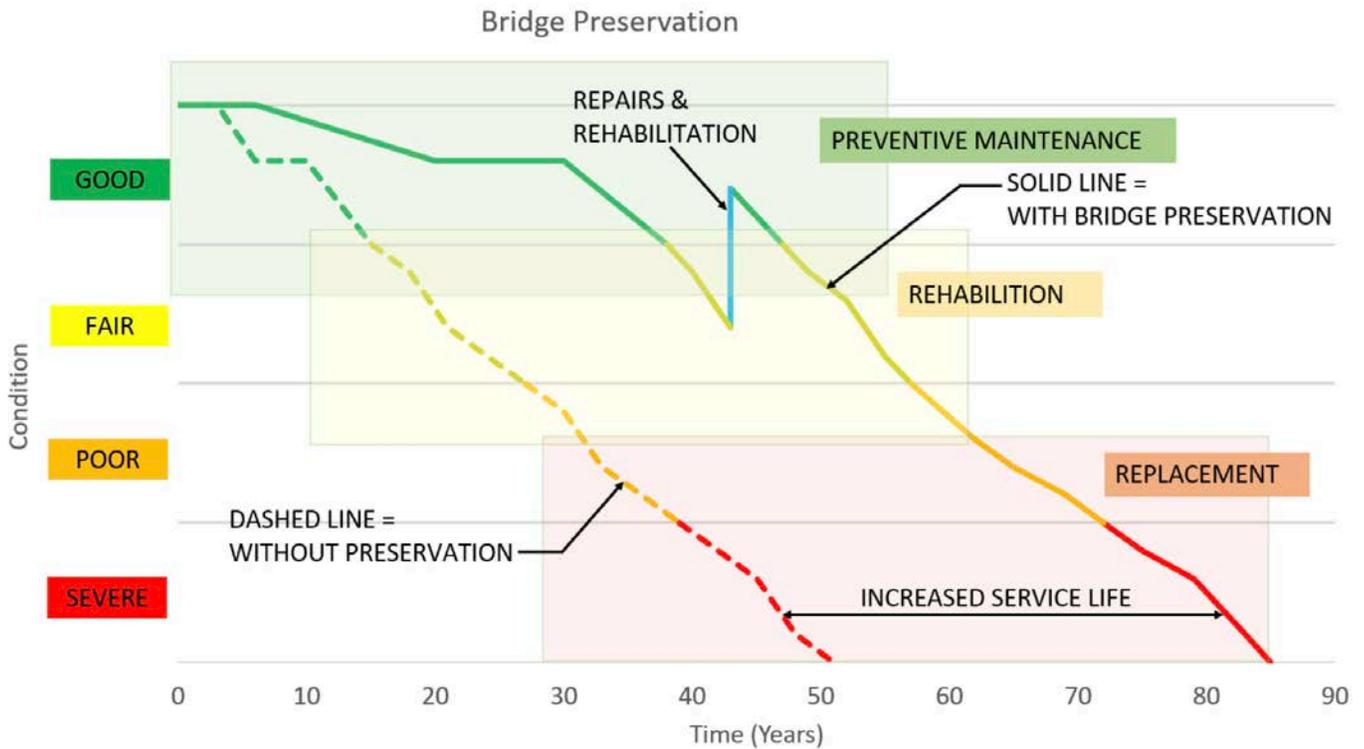
Bridge rehabilitation requires a licensed engineer to design and stamp the rehabilitation plans and the work will need to be done by a licensed contractor.



## BRIDGE REPLACEMENT

When a life-cycle cost analysis determines that rehabilitation is not cost effective or a bridge does not meet certain current standards or geometric requirements, then a complete replacement is necessary. When determining the cost of bridge replacement, it is also important to consider the approach of work as this is another significant project expense.

The following graph shows how timely investments in bridge assets through preservation and maintenance activities can substantially extend the life of the structure.



If you are interested in additional information and guidance on expected service life visit the FHWA InfoBridge website at <https://infobridge.fhwa.dot.gov/Data>. The following graph shows an example of an Idaho bridge representing deck conditions from previous ratings along with the anticipated deck condition rating.



# WHERE BIG DATA MEETS TRAFFIC ANALYTICS

REQUEST A DEMO TODAY

REDUCE CONGESTION,  
ACCIDENTS, AND  
EMISSIONS

SOFTWARE ONLY...  
UNLOCK THE POWER OF  
YOUR INFRASTRUCTURE

REAL TIME  
24/7/365  
GRID COVERAGE

**GRIDMATRIX**  
Engineering the future of Transportation

[www.gridmatrix.com](http://www.gridmatrix.com) | [info@gridmatrix.com](mailto:info@gridmatrix.com)

# MHL SYSTEMS

**POWER. STRENGTH. DURABILITY.**

WITH A LIFETIME UNLIMITED WARRANTY

CARBIDE PRODUCTS - MADE IN USA 

(800) 999 - 7517



**Interlocking Carbide  
Snow Plow Blades**  
*End Guards - Blade Savers*



**MHL Heavy & Severe Duty  
Carbide Scarifier Systems**  
*Max-Duty Carbide Teeth*



**Carbide Dowel Grader Blades  
w/ Notched Armor-500 Plates**  
*End Guards - Blade Savers*



**Kennametal Dual-Carbide  
Grader Blades**  
*End Guards - Blade Savers -  
Face Protection Plates*



**Small Truck Carbide Blades**  
*Boss - Western - Fisher -  
Henke - Etc.*



**Loader Buckets**  
*Reversible MAG400 Blades  
& Repairs*

[www.mhlsystems.com](http://www.mhlsystems.com)  
[chip@mhlsystems.com](mailto:chip@mhlsystems.com)  
[matt@mhlsystems.com](mailto:matt@mhlsystems.com)  
**801 268 1946**  
**Salt Lake City, Utah.**