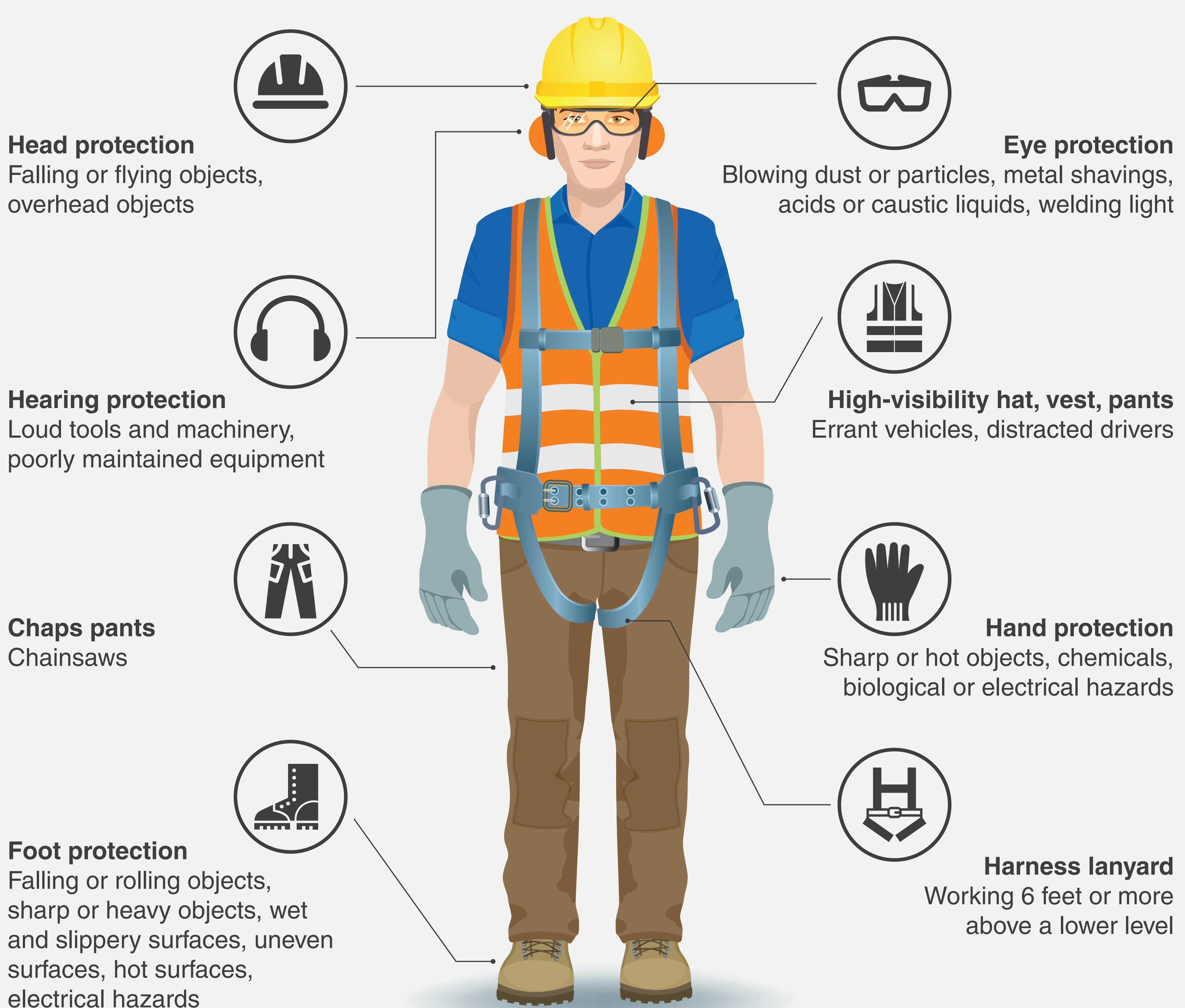


Personal Protection Equipment Resources for Outdoor Maintenance Workers



Interactive Website & Posters Available at mnltap.umn.edu/PPE

PPE PERSONAL PROTECTIVE EQUIPMENT
Be smart. Be safe. Wear your PPE!

Head protection
Falling or flying objects, overhead objects

Eye protection
Blowing dust or particles, metal shavings, acids or caustic liquids, welding light

Hearing protection
Loud tools and machinery, poorly maintained equipment

High-visibility hat, vest, pants
Errant vehicles, distracted drivers

Chaps pants
Chainsaws

Hand protection
Sharp or hot objects, chemicals, biological or electrical hazards

Foot protection
Falling or rolling objects, sharp or heavy objects, wet and slippery surfaces, uneven surfaces, hot surfaces, electrical hazards

ADDITIONAL PROTECTION EQUIPMENT

Face protection
Larger particles or fragments, splashes and sprays, wood chips

Respirator
Harmful dust, fumes, gases, smoke, or vapors

Long sleeves
Hot tar, other substances

Overall
All types of body hazards

CHOOSE THE RIGHT TYPE OF PPE FOR THE JOB
There are different types of PPE for different work settings and conditions.
Talk to your supervisor and see mnltap.umn.edu/PPE for more information.

Learn more: mnltap.umn.edu/PPE

PPE PERSONAL PROTECTIVE EQUIPMENT
Be smart. Be safe. Wear your PPE!

IF YOU DON'T, YOU MIGHT:

- Get a head injury.
- Damage or lose your eyesight.
- Have hearing loss.
- Damage your lungs.
- Get a serious cut or puncture wound.
- Lose a finger or toe.
- Get an electric shock or burn.
- Break a bone.
- Be hit by a vehicle.
- Be unable to work temporarily or forever.
- Die.

SET THE EXAMPLE!

- Always use PPE when required.
- Attend PPE training about worn or damaged PPE.
- Encourage others to use PPE.

WHAT IS PPE?
Personal protective equipment (PPE) protects workers from serious workplace injuries or illnesses. Examples of PPE include hard hats, face shields, goggles, gloves, vests, respirators, safety shoes, and coveralls.

EMPLOYERS MUST PROTECT THEIR WORKERS
The U.S. Occupational Safety and Health Administration (OSHA) requires that employers protect their employees from workplace hazards that cause injury. Employers must ensure that employees have PPE equipment in accordance with federal OSHA and Minnesota state standards. In Minnesota, employers are responsible for all PPE required for employees to perform their job safely. Tell your supervisor if you have questions.

Learn more: mnltap.umn.edu/PPE

PPE PERSONAL PROTECTIVE EQUIPMENT
Employers: What You Need to Know

The U.S. Occupational Safety and Health Administration (OSHA) requires that employers protect their employees from workplace hazards that can cause injury. Employers must also comply with all applicable Minnesota OSHA standards.

Assess hazards
As an employer, you must assess your workplace to determine if hazards are present that require the use of personal protective equipment. If such hazards are present, you must select protective equipment and train workers to use it. Communicate your protective equipment selection decisions to your workers, and use personal protective equipment that properly fits your workers.

Train your workers
You must also train workers who are required to wear personal protective equipment on how to do the following:

- Use personal protective equipment properly.
- Be aware of when personal protective equipment is necessary.
- Know what kind of protective equipment is necessary.
- Understand how to use personal protective equipment in protecting workers from injury.
- Put on, adjust, wear, and take off personal protective equipment.
- Maintain protective equipment properly.

Provide PPE
By Minnesota statute, employers must provide PPE required for employees to perform their jobs safely. PPE should only be used when all feasible engineering controls, administrative controls, and administrative controls have been implemented, but are not enough to adequately protect employees.

Conduct hazard assessment
A first critical step in developing a comprehensive safety and health program is to identify physical and health hazards in the workplace. This process is known as a "hazard assessment." Potential hazards may be physical or chemical, ergonomic, or biological. Examples of physical hazards include moving objects, fluctuating temperatures, high-intensity lighting, rolling or pinching objects, electrical connections, and sharp edges. Examples of health hazards include overexposure to harmful dusts, chemicals, or radiation.

The employer's responsibility

- Conduct hazard assessments.
- Provide PPE.
- Train workers on how to wear, care for, and store PPE.
- Enforce PPE usage.
- Set an example: use PPE.

Take a hazard assessment
Begin the hazard assessment with a walkthrough survey of the facility to develop a list of potential hazards using the following basic hazard categories:

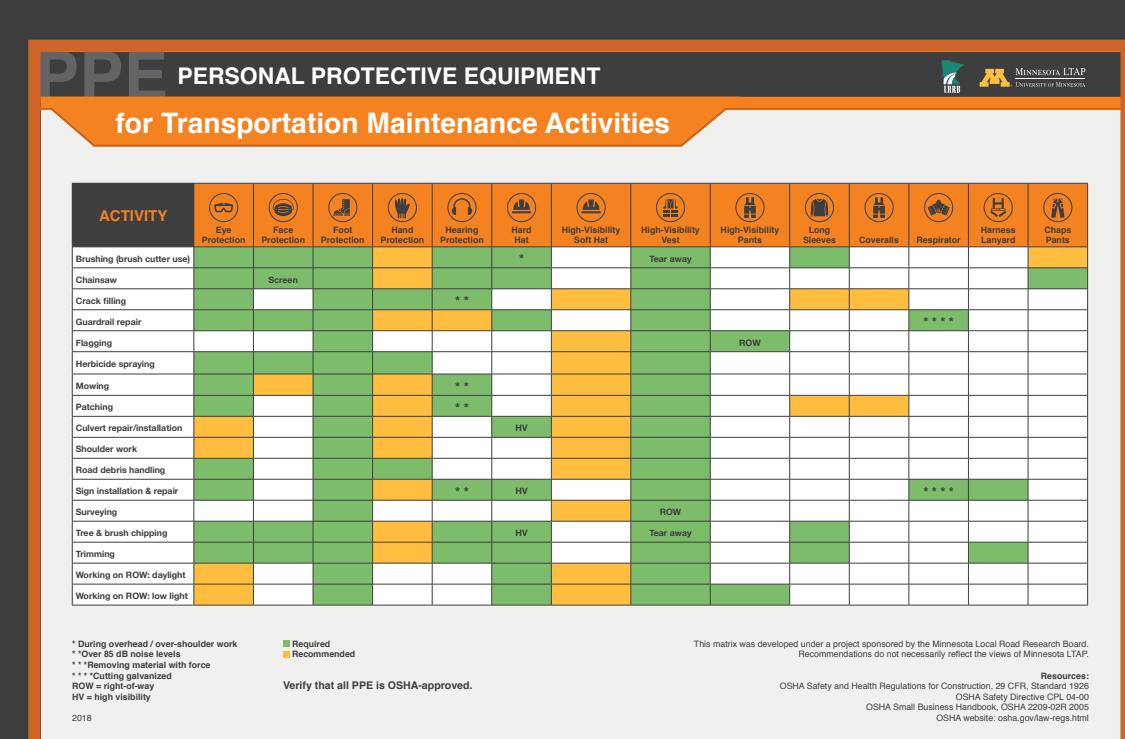
- Impact
- Penetration
- Chemical
- Biological
- Heat/cold/harmful dust
- Light (optical) radiation
- Biohazard

Checklist

ACTIVITY	Impact	Penetration	Chemical	Biological	Heat/cold/harmful dust	Light (optical) radiation	Biohazard	Tool safety	High visibility	Hand protection	Foot protection	Overall
Bracing/break collar work	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Cross-tie work	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Guardrail repair	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
High-voltage work	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Mobile scaffolding	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Painting	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Power tool use	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Crane/hoist operation	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Crane/hoist maintenance	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Demolition	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Excavating	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Electrical work	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Sign installation & repair	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Surveying	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Tree trimming/limbing	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Working on ROW/adjacent	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Working on or near	Yes	No	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes

Legend:
● Required
○ Recommended
... Recommended with force
■ Not recommended
X Not high risk

This matrix was developed under a project sponsored by the Minnesota Local Road Research Board (LRRB). It is based on the OSHA Small Business Guide for Construction, 29 CFR, Part 1910.132(d)(1), OSHA Safety Directive CPL 02-00-01, and OSHA Small Business Guide for Construction, 29 CFR, Part 1910.132(d)(1).



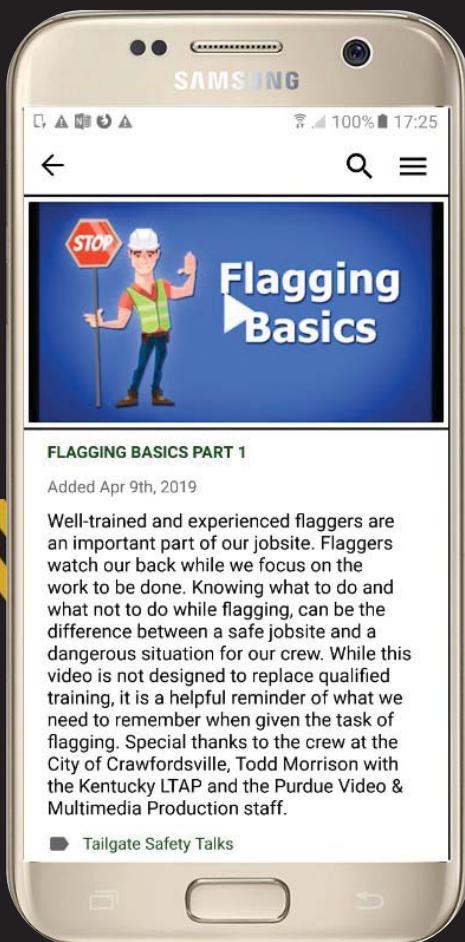
MINNESOTA LTAP
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PURDUE
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Local Technical Assistance Program

Americans with Disabilities Act

Sidewalk Facilities for Public Rights-of-Way Workshop

According to the 2010 census, 57 million Americans over the age of 15 have a disability.

Small details we think nothing about when crossing the street, like steep slopes and bumps, can present great challenges to the disabled population.

This workshop is designed to offer participants information allowing them to better understand the needs of disabled individuals. Participants leave the workshop with tools that will help them design infrastructure projects that maximize accessibility for all users.

HANDS-ON EXERCISES

The wheelchair and cane exercises put participants in the shoes of those who use accessible public rights-of-way every day. It helps the participants better understand the needs of disabled individuals.

The construction inspection exercise has participants inspect sidewalk and ramp dimension measurements, joints and transitions. They also complete a worksheet on sidewalk and ramp slope measurements.

"Those of us who plan, design, build and maintain roads, understand cars, trucks and drivers well. Turning radius, operational speed, grades and slopes...we have an idea what these need to be for roads, but not for sidewalks."
- Jeff Jasper, P.E., Director, Division of Highway Design, Kentucky Transportation Cabinet (retired)



Macros: How To Save Time On Administrative Tasks



Previous Method

**Open Sign-In Sheet, Roster,
& Name Tags Templates**

For All Three Documents:

Choose File To Pull From

**Edit Order Of
Information**

**Finish & Merge Information
Into Document**

Format

Total Time: 10 min

New Method With Macros

**Open Admin Document
With Built In Macros**

Press Macro Button

Format

Total Time: 2 min

This poster shows how Macros can save you time and effort when creating admin packets for training workshops, but they can do so much more! Creating a Macro is a way to automate repetitive steps or processes in Excel or Outlook. It requires basic coding , which is simple enough to learn on your own, but feel free to ask an IT professional for help. Using Macros is an innovative way to increase efficiency, reduce time, and produce consistent results.



TAILGATE SAFETY BRIEFINGS



AN EXAMPLE

Delaware T²/LTAP Center developed a package of ladder safety materials for use by local agencies and the Municipal Engineering Safety Rider has presented them directly during site visits. These materials have been shared with the NLTAPA depository for use by all Centers. Connecticut has already modified the materials for their local agencies, causing Louisiana to take interest...that's the idea.

A NEW AND DEVELOPING INITIATIVE FROM THE TRAINING RESOURCES WORKGROUP

**CREATE, CONTRIBUTE,
BORROW, MODIFY, AND
PUT TO USE**

Personnel from all Centers are encouraged to download and distribute to local agencies, modifying as you see fit; we just ask for a mention when we're the creators.

If you are able, create and contribute safety talks of your own.

ULTIMATELY, LOTS OF TOPICS, LOTS OF STYLES

We plan to populate with lots of topics.

We may have several versions of some topics.

Some will be fancy, polished, and even "robust," while others will be brief or rustic; better to serve the needs of your locals and the targeted time.

**LEARN MORE AT THE TRAINING
TOOLS AND TIPS II BREAKOUT
SESSION JULY 24 AT 3:30 PM**

What's available, where do I find them, how can I be a part of this? Find out in Royal Salon D.



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GLUE FOR GRAVEL ROADS

While even the best of gravels can't match the year-round qualities of asphalt, we can sweeten the mix and make them better with "*That Little Something Extra*" – Clay.



Training



Preparation



Placement

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