

Roadside Safety Webinar - Aging Municipal Roadside Hardware

Topic: Importance of Installation, Maintenance, and
Inspection Roadside Training Programs

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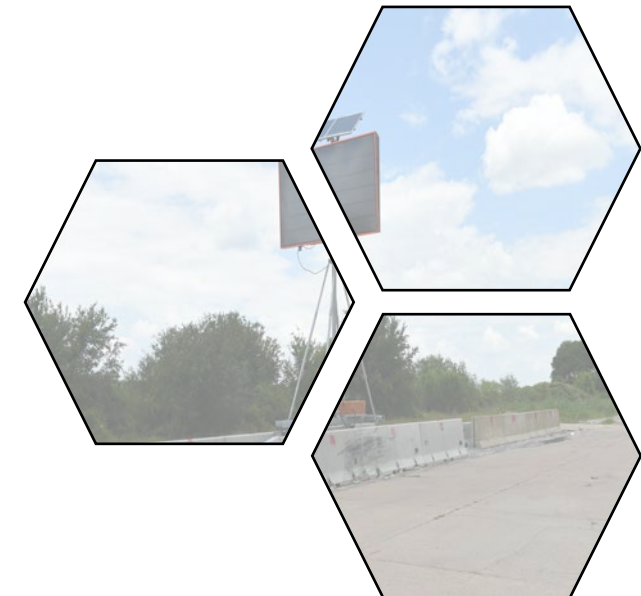


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Northern Infrastructure Products Inc:

Northern Infrastructure Products Inc. assists the design, testing, and implementation of roadside safety solutions. Our mandate is simple: Work with road authorities, designers, and contractors to Identify, Analyze, and Solve a broad spectrum of roadside safety needs.

- ❑ Identify: Work with our customers to identify unique road safety issues that require a solution in a reasonable time frame.
- ❑ Analyze: Our expert team will then analyze the issue and decide which research and development stream will provide the optimal results. (Design, Simulation, Crash Testing)
- ❑ Solve: When the research and development stream our deliverable is an innovative design solution that will satisfy the end users requirements and safety due diligence.

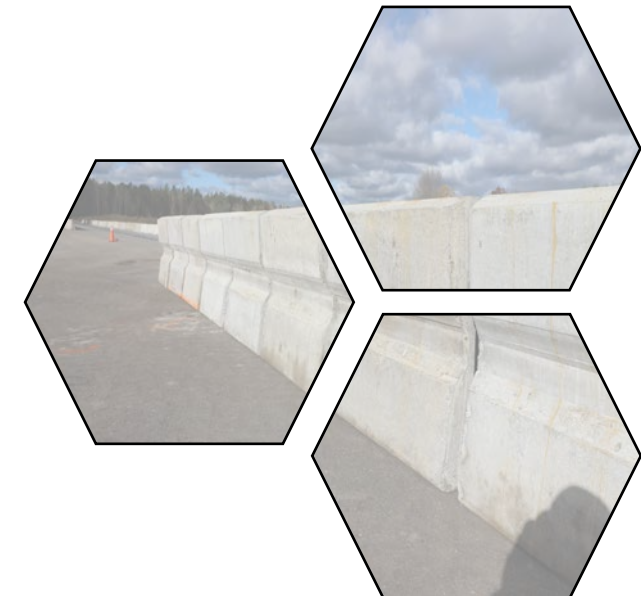




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Municipal Roadside Hardware Challenges:

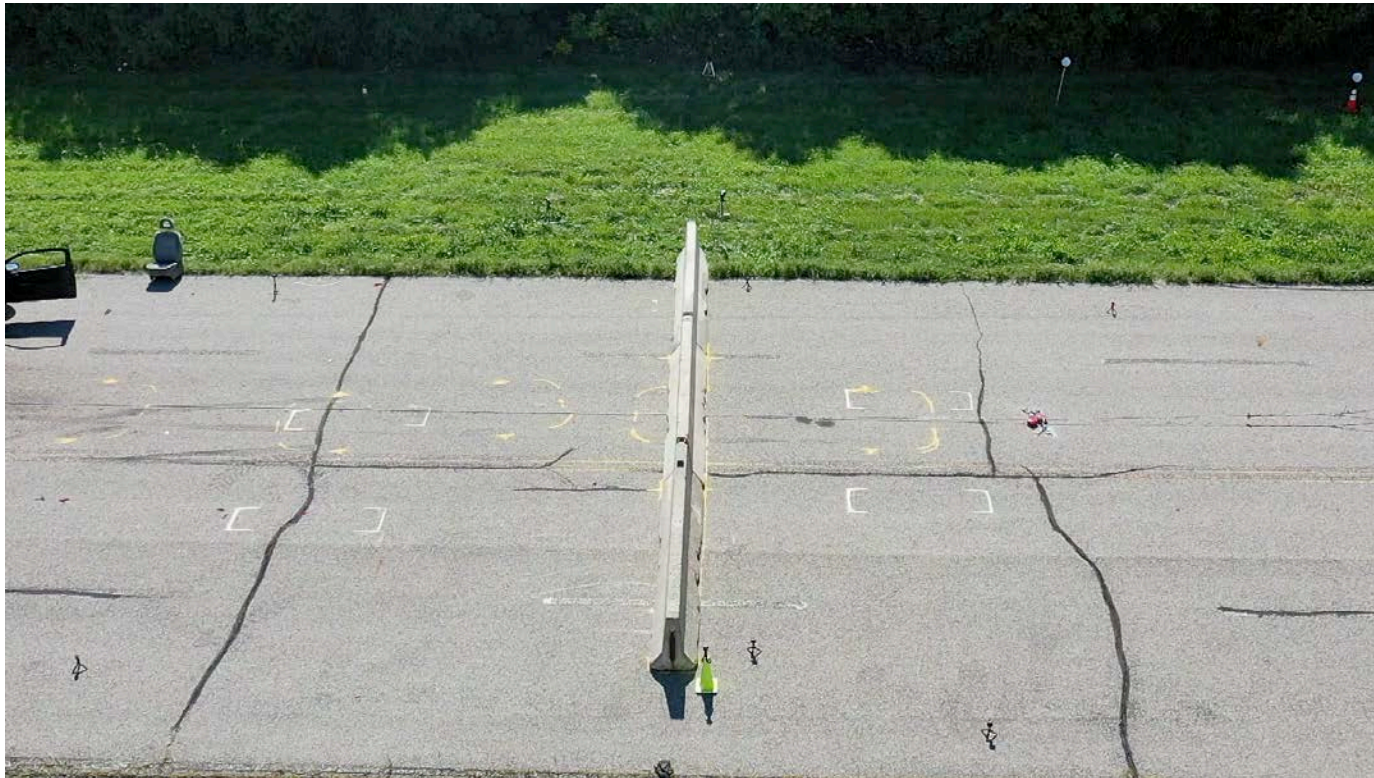
- Is the roadside safety product installed still necessary (what is it protecting)?
- Have new hardware specifications been successfully tested to MASH 2016 on new construction projects?
- Have installers and maintenance crews received and documented appropriate training, and are training credentials up to date?
- Are Designers and Consultants specifying the current roadside safety hardware for new construction projects? Have they been Trained?
- Have processes been put in place that track/document installation and maintenance activities?
- Internal personnel changes – Additional time to train incoming staff
- Keeping up with Provincial specification updates (OPS)
- Existing hardware that does not meet MASH, NCHRP 350, or potentially does not meet any crash worthy standard..... What do we do with that hardware?



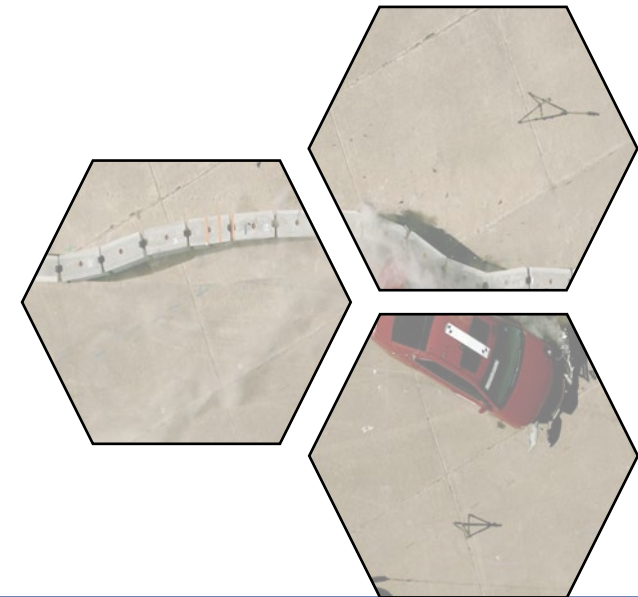


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Understand Product Limitations and Appropriate Site Conditions



Video courtesy of Safe Roads Engineering Inc.

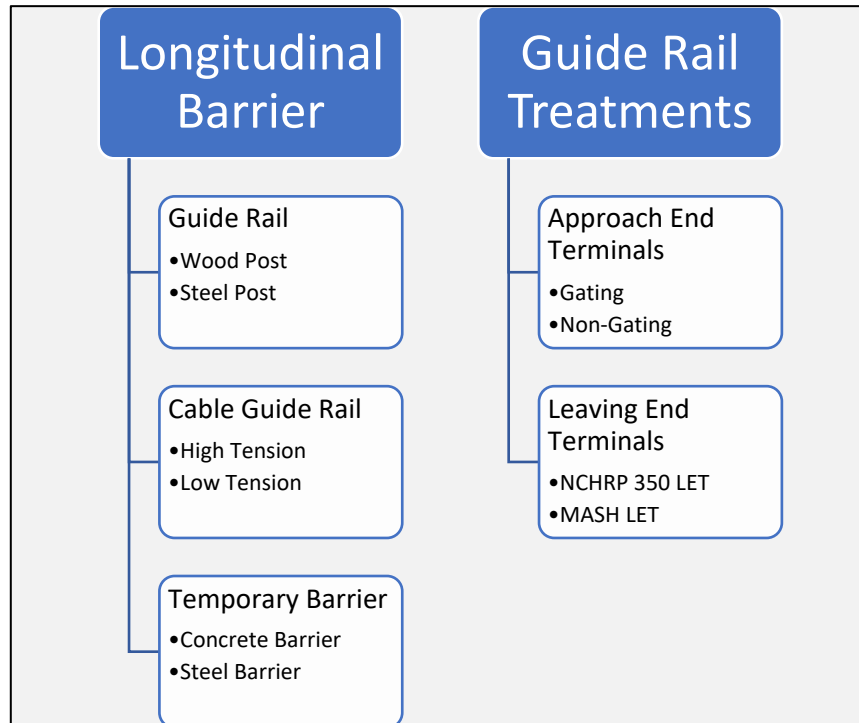




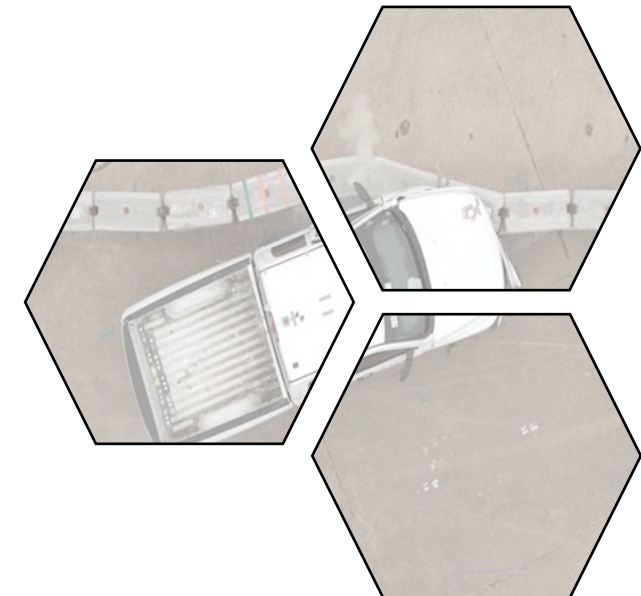
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Hardware Identification and Documentation:

Roadside Hardware can be identified and documented in Data Silos



- ❑ To ensure that roadside hardware is documented appropriately – staff, at a minimum, must have basic roadside safety hardware knowledge.
- ❑ A competent employee should be able to identify each type of product on the road and have a basic understanding of the Provincial Standard or the manufacturers crash tested configuration.





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Training Programs – State Department Experience:

Utah & Indiana DOT's

- Have developed advanced training programs and implemented within their states
- The training program identifies the training requirements for devices and maintenance of roadside safety hardware
- Installation, Maintenance, and Inspection/Design roadside training is a prerequisite
- The training programs are certified, documented, and updated as necessary
- As standards are updated within the State, so too are the training requirements
- Work closely with manufacturers and manufacturers distributors to ensure programs are relevant, well-documented, and have some form of due diligence testing upon completion
- Have State staff that will check on training credentials on site





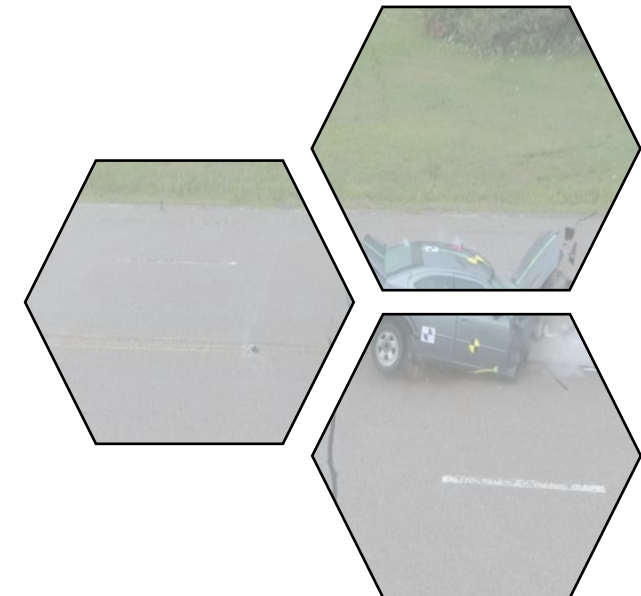
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FAST ACT Program:

Mission – To develop and deliver a program that incorporates training, technical briefs, pocket guides and checklists that will improve an agency’s ability to design, install, and maintain and repair roadside barrier systems through a sustained program that will improve roadway departure safety.

Narrative in Ontario is the same – Training and Awareness will improve Road Safety

Improve not only the level of training at the field level – but also focus on appropriate training programs geared towards engineers and designers.





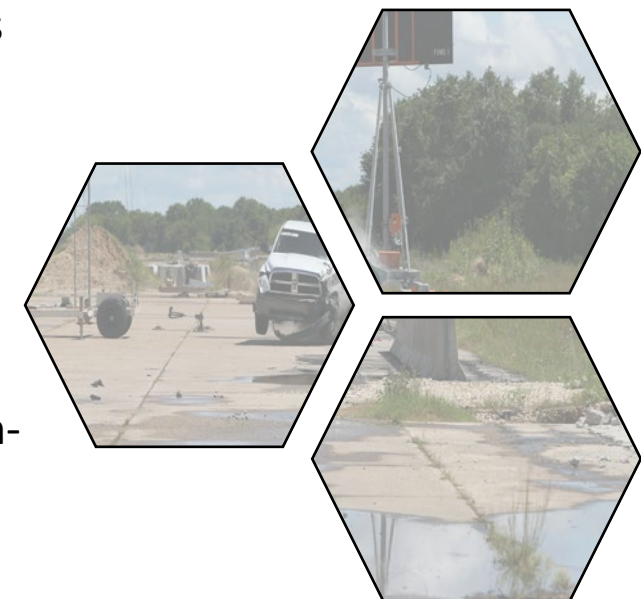
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Why Training Now:

The answer to this question is simple

- ❑ Our industry just went through a massive shift in roadside hardware crash testing guidelines (NCHRP 350 – MASH). More product updates in last 5 years vs the previous 20 years combined.
- ❑ The province has adopted MASH into all categories of roadside hardware where product is available (Guide Rail, Cable Guide Rail, End Terminals, Crash Cushions, etc.)
- ❑ Improved roadside safety hardware technology has been introduced into our industry – Products, standards, and levels of safety have been elevated
 - So too should our training requirements

The industry is constantly evolving and changing to meet vehicle demographic changes and in-service performance data. We must ensure that all employees are also keeping up with these changes to Critical Infrastructure through training and awareness programs.

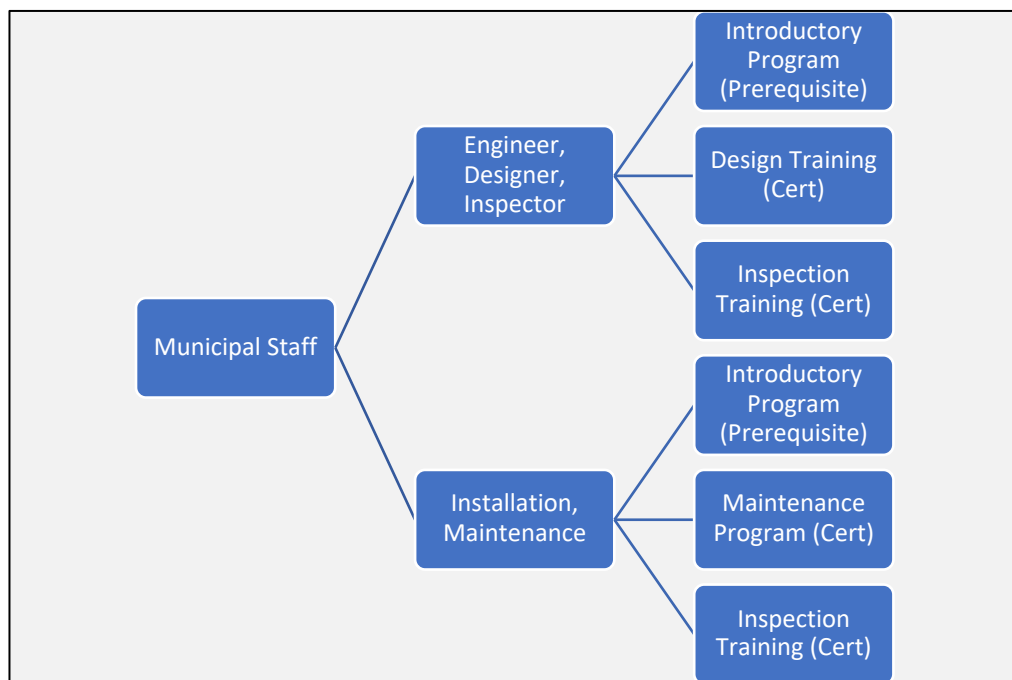




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Choosing the Right Training Path:

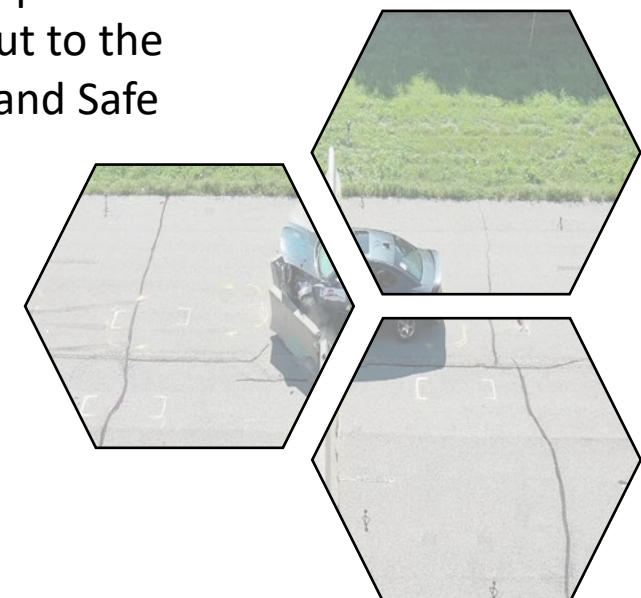
There are a variety of training programs available in Ontario, and some programs that are currently in development. The level of training with respect to roadside safety hardware will be dependent upon the municipal employee's roles and responsibilities.



For more information relating to specific training programs please reach out to the Ontario Good Roads Association and Safe Roads Engineering

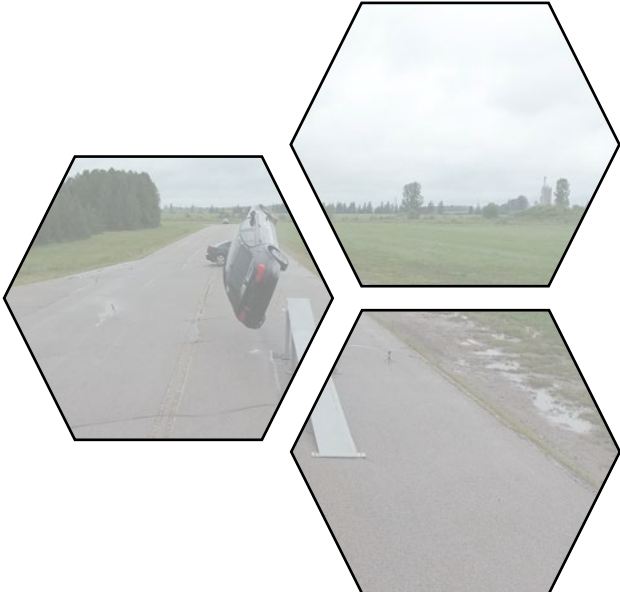


**SAFE ROADS
ENGINEERING**





Video courtesy of Safe Roads Engineering Inc.



Know your Assets and Understand how they are Tested - Training is Essential

Thank you for your time today!