

# What Employers Need to Know to Keep Roadside Workers Safe

Does your organization have employees working on or beside the road? Use this guide to understand your safety responsibilities for them. The guide provides an overview of Part 18 of the [Occupational Health and Safety Regulation](#) and the [2020 Traffic Management Manual for Work on Roadways](#).

## Employer responsibilities

A roadside work zone is a workplace, meaning you need to ensure the health and safety of all of your employees on site.

Part 18 of WorkSafeBC's *Occupational Health and Safety Regulation* (the Regulation) lays out specific responsibilities for protecting workers wherever traffic could be hazardous to them.

The Ministry of Transportation and Transit's *2020 Traffic Management Manual for Work on Roadways* (the TMM) is to be used for all work on Ministry roadways unless otherwise stated.

Employers need to comply with Part 18 in concert with the TMM. Follow Part 18's requirements where there are conflicting requirements, such as the ones applying to winter road maintenance activities, prime contractors, and the use of traffic control persons.

## Safe procedures for roadside work

Your organization needs to develop safety procedures for your employees to follow when working around traffic. Your procedures need to cover:

- Hazards at the work zone and how workers can help protect themselves
- The traffic control layout at the work zone
- Who is responsible for design and setup of the work zone
- Escape routes in case vehicles cross over into the work zone
- Procedures and contact information in case of an emergency incident

You also need to ensure:

- Supervisors conduct a daily safety briefing before work begins
- Records are kept of worker training and safety communications

## What you need to know about Part 18 of the Regulation

### Using the hierarchy of controls

As the employer, you need to eliminate or reduce the risk of worker exposure to traffic. The steps you take need to be:

- Appropriate for the work
- Based on your risk assessment
- In order of the priorities set out in the hierarchy of controls (Part 18 refers to it as the “order of controls”)

- Here are some examples of commonly used controls:
  - Elimination: Detours or alternate routes.
  - Engineering: Concrete barriers, automated flagger assistance devices (AFADs), portable traffic signals, and other types of barricades. Avoid using only delineators because they provide little protection.
  - Administrative: Schedule work in off-peak hours. Use traffic control persons when permitted only after all other measures are determined to be insufficient.

## How to apply the hierarchy to roadside work zones

Here are some options for controls you can use to reduce the risk to workers posed by traffic driving through a roadside work zone. Regulations require you to start at the top of the hierarchy and work your way down. Most work zones will require a combination of these options.

### Elimination

Examples: Detours and alternate routes.



### Substitution

If there is no possible substitution, move on to engineering controls.



### Engineering

Examples: Automated flagging assistance devices (AFADs), barriers, crash attenuators, and other temporary traffic control devices.



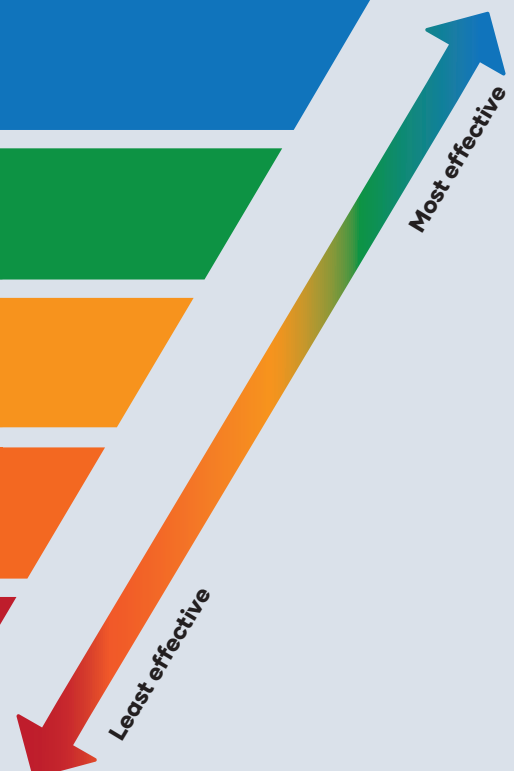
### Administrative

Examples: Adjusting work procedures and scheduling work when traffic volumes are lower.



### Traffic control persons/PPE

Example: Properly trained traffic control persons, if permitted. They need to have the necessary personal protective equipment.



## 3 steps to planning a work zone

WorkSafeBC's Part 18 requires employers to complete a 3-step process when planning a work zone:

- Step 1: Define the type of work
- Step 2: Conduct a risk assessment
- Step 3: Apply the hierarchy of controls (Part 18 calls it the "order of controls") based on the risk assessment

Consult with your traffic control persons when completing these steps. They have training that can be helpful, including knowledge about the deployment of temporary traffic control devices and the TMM.

## Types of work zones and their requirements

Here are definitions for the different types of work that can take place at the roadside. Find the one that best suits the work you're planning and review the suggestions.

### Type of work: Emergent duration

This is a quick response due to an unanticipated event, other than an emergency. The work takes less than 5 minutes. Examples may include removal of dead animals or debris.

What you need to do: Have a worker conduct an on-site risk assessment before leaving the vehicle. Ensure employees follow your written work procedures. Your procedures need to specify temporary traffic devices and what workers do if the job can't be completed within the allotted time due to unanticipated circumstances. Do workers call for additional assistance or more vehicles? If an emergent duration job requires more time, brief duration or full-on traffic control needs to be implemented.

More information: See Part 18.3.1 (2). Use the TMM Page 6-36 Table C as a starting point.

### Type of work: Brief duration

This is planned work of 15 minutes or less. Examples may include clearing road drains, catch basins, and pothole repair.

What you need to do: Have a worker conduct an on-site risk assessment before leaving the vehicle. Ensure employees follow your written work procedures. Your procedures need to specify temporary traffic devices and what workers do if the job can't be completed within the allotted time due to unanticipated circumstances. Do workers call for additional assistance or more vehicles? If a brief duration job requires more time, full-on traffic control needs to be implemented.

For more information: See Part 18.3.1 (2). Use the TMM Page 6-36 Table C as a starting point.

### Type of work: Emergency

This is a situation requiring immediate action to protect lives or prevent serious injury. It applies to firefighters, tow truck operators, paramedics, utility workers, road authority workers, road maintenance workers, etc.

What you need to do: If police are on scene, they can direct traffic. When police aren't available, first responders can direct traffic for up to 2 hours from the start of the emergency. After that, planned traffic control is required.

You need to ensure first responders have basic traffic control equipment to protect themselves. You also need to train them in:

- Basic traffic control principles
- Setup, use, and takedown of traffic control devices
- Basic principles of the TMM
- Use of a buffer vehicle
- Safe work procedures
- Appropriate selection and use of personal protective equipment

## Type of work: Long or short duration

Long duration work requires more than one daylight period to complete, or night work, or mobile work.

Short duration work requires more than 15 minutes during a single daylight period to complete.

What you need to do: Both of these types of work require a written risk assessment that addresses reasonably foreseeable hazards. Factor in the number of lanes and road surface conditions, complexity of the work, traffic volumes, time of day, and level of supervision.

Both types of work also require a written traffic control plan. If traffic control persons will be required, plan where they can be positioned, hygiene and other breaks, shift durations and number of persons, and escape routes. Factor in weather conditions. Provide site-specific orientation and training. Your plan needs to be reviewed and updated by a qualified person. It's a living document that may need to be updated if there are significant changes in the work environment.

Both types of work require you to ensure employees follow your written work procedures.

For more information: Review Part 18.3.1 for more guidance.

## Type of work: Mobile

This is continuous or slow-moving work with stops of 30 minutes or less. Examples include grass cutting and street cleaning.

What you need to do: Have an employee conduct an on-site risk assessment before starting the work. Ensure employees follow your written work procedures.

## Traffic control plan

Part 18 requires a written traffic control plan for short and long duration work. The plan needs to be based on your risk assessment. It needs to ensure traffic control persons are positioned in a safe location as identified in the risk assessment. It also needs to contain traffic layouts and procedures that help protect workers.

Your plan needs to cover:

- Your traffic control strategy
- The traffic measures you'll use, based on the hierarchy of controls
- Instructions for implementation of the plan, including schedules
- A clear statement of roles and responsibilities for implementation

Your plan needs to be specific to the work being done. You can have a templated plan but it needs to be customized for each work zone.

Regularly review your traffic control plan and update it as needed. If you update your risk assessment, be sure to update the plan too.

For more information: Review Part 18.3.3.

## Traffic control persons

Be sure to follow Part 18.6's requirements for traffic control persons (TCPs). The regulations have been expanded and differ in some instances from what's in the TMM.

You cannot use TCPs in work zones where speed limits are greater than 70 km/h. They're prohibited from directing traffic contrary to what signs, signals, or traffic control devices indicate.

If TCPs are allowed for your project, it's your responsibility to reduce the risk of them being exposed to traffic. Part 18 specifies where TCPs can stand. They can't be in an intersection open to traffic flow. Your risk assessment needs to identify safe locations for them, such as on the shoulder or curb adjacent to traffic or in a lane closed by barriers. You have to provide them with an unobstructed escape route.

If you're onboarding TCPs at a job site, you need to give them site-specific orientation. The prime contractor or employer shares responsibility for TCP training, instruction, and supervision with the traffic control company.

TCPs have the right and obligation to refuse unsafe work.

## Traffic assistants

Part 18 creates the position of traffic assistants. This person can assist or direct drivers in a parking or holding area within a specified work area. Examples include parking lots, festival parking areas, and vehicle loading areas at ferry terminals.

Traffic assistants are not traffic control persons and can't provide traffic control. They need to complete training outlined in Part 18.6.3.

## Supervision

All of WorkSafeBC's health and safety requirements for supervision apply in work zones. A qualified supervisor needs to be present whenever traffic control is required. On complex sites, it may be prudent to have a designated traffic supervisor available at all times. Part 18 requires prime contractors to designate a qualified traffic control supervisor.

In general, the supervisor oversees traffic control operations, ensuring the plan is followed and updated as necessary.

The supervisor's responsibilities include ensuring:

- Compliance with Part 18
- Required traffic control devices are in place
- Signs are checked, maintained, and moved as required
- Daily traffic control setups are documented, and changes are identified in the traffic control plan or log book
- Traffic concerns are reported to the traffic control manager or site supervisor
- Each member of the traffic control crew wears the required personal protective clothing and equipment
- TCPs have completed training and have the necessary certification

Part 18 adds some other specific supervisory duties. For example, it's the supervisor's responsibility to ensure traffic control persons get orientation and training at the work zone before their first shift. The supervisor needs to document the training and ensure it covers what's in your risk assessment.

## What you need to know about the Traffic Management Manual (the TMM)

The Ministry of Transportation and Transit's TMM covers the fundamentals of traffic management and traffic control. It aims to help protect workers and accommodate road users while work is under way.

WorkSafeBC's Part 18 requires compliance with the TMM in all roadside work zones. Remember: When Part 18 and the TMM differ, follow Part 18's requirements. The following information is an overview of some TMM guidelines that haven't been covered elsewhere in this guide.

## Traffic management plan

The TMM calls for a traffic management plan that details strategies for protecting workers and safely and efficiently moving road users through your work zone. Part 18 requires a traffic control plan, which is part of a traffic management plan.

Your project will fall under one of the following categories:

- Category 1: Minimal impact on the travelling public
- Category 2: May be located on higher-speed or higher-volume corridors and involve some complexity
- Category 3: Complex and has a significant impact on the travelling public

Each category has different requirements and traffic management plans.

For information, including how to analyze risk, see Section 3: Traffic Management Plans.

Use templates in Appendix C: Templates for Traffic Management Plans to get started.



## Traffic control layouts

Your traffic management plan needs to include a traffic control plan that includes a layout showing the use of signs, cones, and other traffic control devices. Review Section 6: Traffic Control Layouts – General Instructions. Then review the layouts for 2-lane/2-way roadways, multilane undivided roadways, multilane divided roadways, and other scenarios in Sections 7-19.

Schedule regular inspections of the work zone to ensure it follows the planned layout. Document any changes.

## Traffic control manager

The prime contractor needs to appoint a traffic control manager who is responsible for preparing, implementing, and managing all of the traffic management plan. This involves reviewing, evaluating, and approving details in the traffic control plan, including traffic control layouts.

The role of traffic control manager should only be assigned to qualified people who have suitable traffic management experience and training. See Section 1.2: Road Authority and Prime Contractor Responsibilities.

For more information about roadside worker safety, visit [RoadSafetyAtWork.ca/WorkZone](https://RoadSafetyAtWork.ca/WorkZone).

## Temporary traffic control devices

Temporary traffic control devices are signs, signals, markings, and other devices used to regulate, warn, and guide road users through or around roadway construction, maintenance, or utility work.

Your traffic management plan needs to include a traffic control plan that outlines the temporary traffic control devices you'll use. Become familiar with your options and stock your vehicles with the proper equipment.

Inspect your traffic control devices regularly to ensure they are in good working condition.

For more information, see Section 3.21: Traffic Control Plan and Section 4: Temporary Traffic Control Device in the TMM, and Road Safety at Work's guide to [Temporary Traffic Control Devices](#).