TEMPORARY TRAFFIC CONTROL DEVICES

ROADWAY SAFETY+

Awareness Program

Trainee Booklet

A Road Construction Industry Consortium Awareness Program

Temporary Traffic Control Devices (TTCDs)

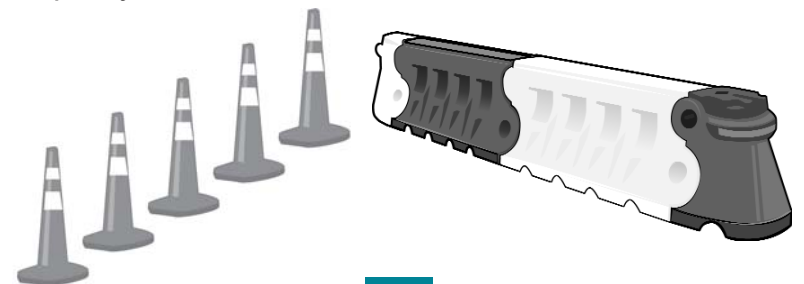## What Is Temporary Traffic Control (TTC)?

Temporary Traffic Control (TTC) allows safe and efficient movement of road users through or around work zones while reasonably protecting workers and responders from traffic incidents and equipment.

TTC includes devices, plans, and applications to guide all road users through work zones.

The goal is to compensate for unexpected or unusual situations faced by road users in work zones, including:

- Safety – workers, public, emergency responders.
- Mobility - minimize congestion, community impact.
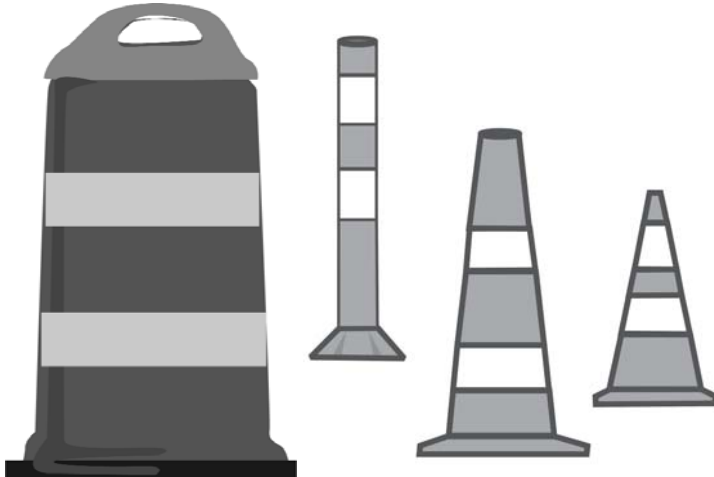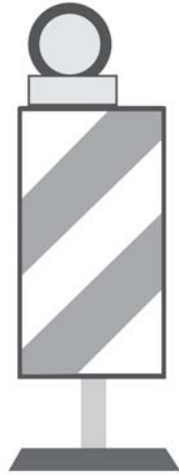- Constructability - complete work on time, meet quality and cost criteria.

What Are Channelizing/Delineation Devices?

Channelizing/delineation devices are all signs, signals, markings, and other devices placed on or near a roadway to regulate, warn, or guide road users through the work zone.

Common devices include:
- Drums.
- Tubular Markers.
- Vertical Panels.
- Cones.
- Type I Barricade.
- Type II Barricade.
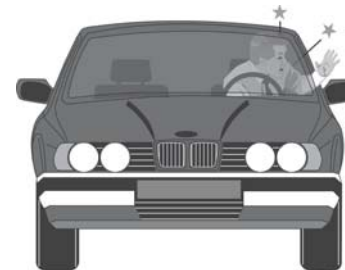- Type III Barricade.
- Direction Indicator Barricade.

What Are the Main Hazards of TTCD Use?

Workers and motorists face different hazards.

Worker hazards:
- Struck by motorist.
- Struck by construction vehicle.
- Fall from vehicle.
- Angry motorists.

Motorist hazards:
- Entering buffer or work space as TTCDs are set up or removed.
- Merging as lane closes.
- Traffic congestion, delays, and rear end collisions.

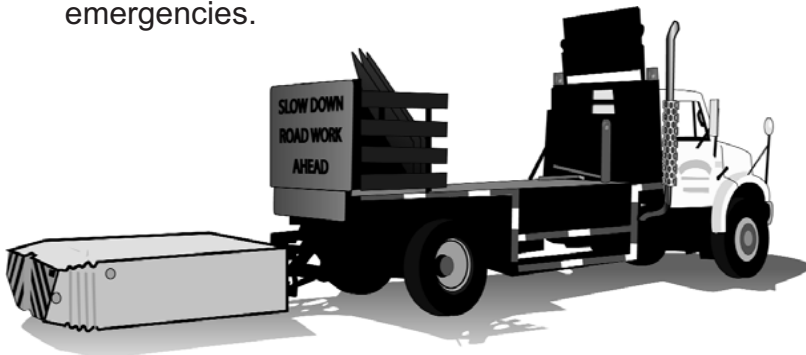## How Can We Safely Place TTCDs?

The contractor must provide safe equipment.

Contractors should provide:
- Platforms for safe deployment/retrieval.
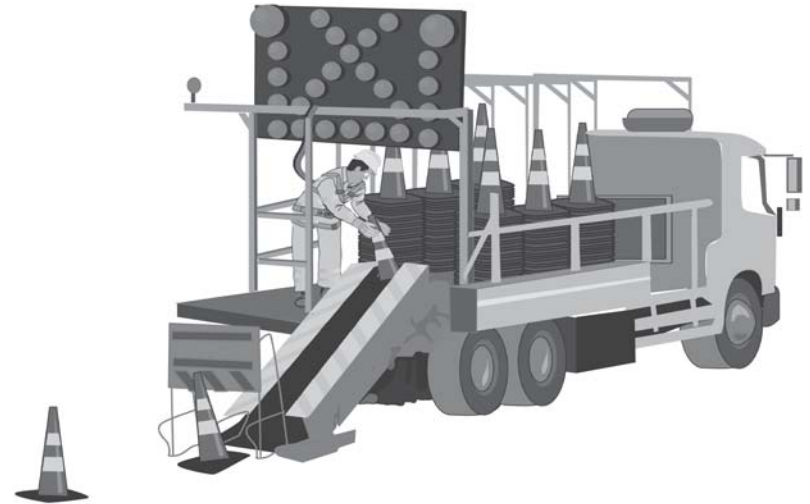- Seat belts, fall restraint, and/or guardrails.

- Shadow vehicles or attenuators.
- Automated TTCD deployment/retrieval devices.
- A means to communicate with supervisors or law enforcement in case of aggressive motorists or emergencies.

Here are some examples of automated TTCD deployment/retrieval devices:
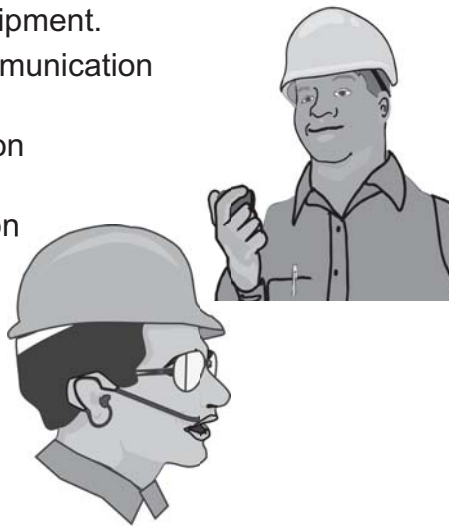
How Can We Safely Place TTCDs?

The contractor must require safe work practices.

Workers should:
- Wear Class III or II high visibility garments.
- When possible, work from a platform on the vehicle.

- Use fall restraint equipment.
- Stay in constant communication with the driver.
  - Visual communication as a minimum.
  - Audio communication is strongly recommended.
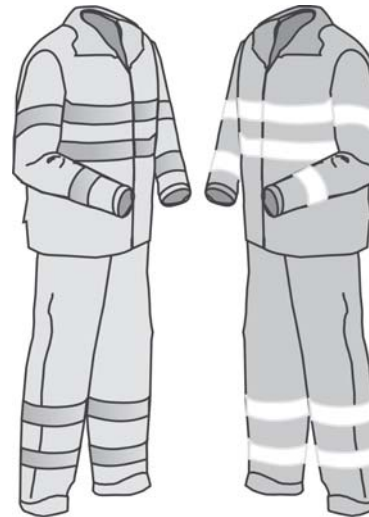 - Audio plus video communication is the best.

How Do We Protect Ourselves?

Be visible and always wear Class III or II high visibility garments:

- **Class II:** For workers in inclement weather and/or in areas with complex backgrounds, where attention may be diverted from approaching traffic, where worker is in close proximity to traffic, where vehicles and equipment travel at speeds greater than 25 mph, and/or in the right of way of any Federal aid highway project. Examples include roadway construction workers, utility workers, and survey crews.
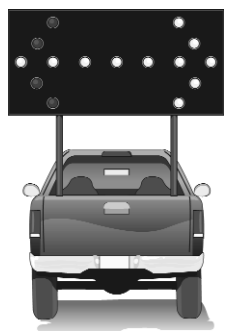
- **Class III:** For work when exposed to high speed traffic and/or conditions where visibility of workers may be reduced. For conditions where equipment operators perform tasks near pedestrian workers. Worker must be conspicuous through a full range of body motions at a minimum of 1,280 feet and indentifiable as a person. Examples include flaggers, roadway construction workers, utility survey crews, and emergency responders.

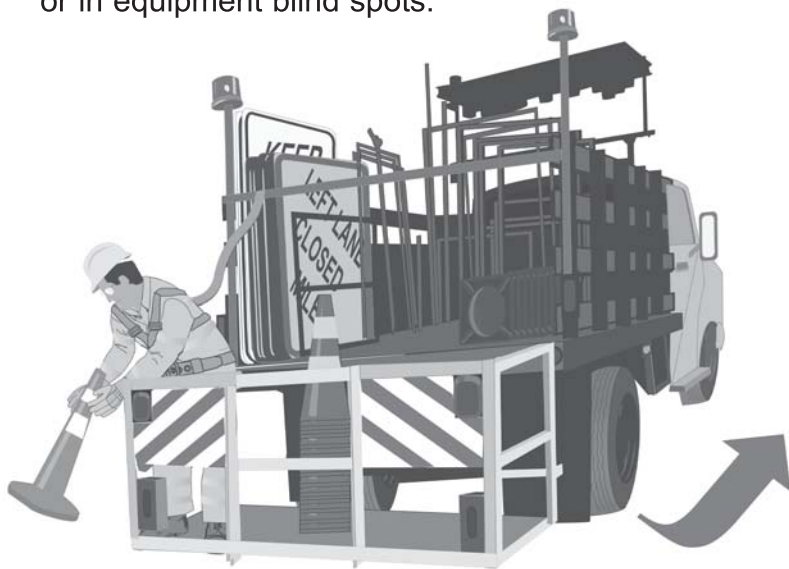## What Are Best Practices?

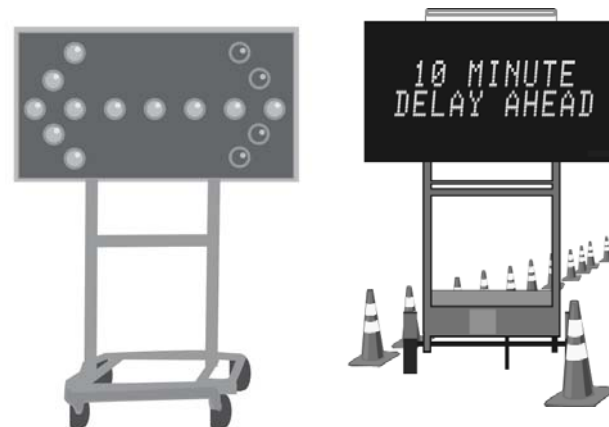Best practices are precautions to make TTCD placement safer. Contractors should:

- Place, relocate, remove TTCDs when traffic is light.
- Install TTCDs from the first TTCD motorist sees to the last.
- Remove TTCDs from the last TTCD motorist sees to the first.
- Avoid backing vehicles whenever possible.

- Prohibit workers on foot from operating behind a backing vehicle, behind vehicles that might back up, or in equipment blind spots.

- Plan "moving work zones" with proper mobile warning devices (see MUTCD).
  - Arrow panels.
  - Changeable message boards.
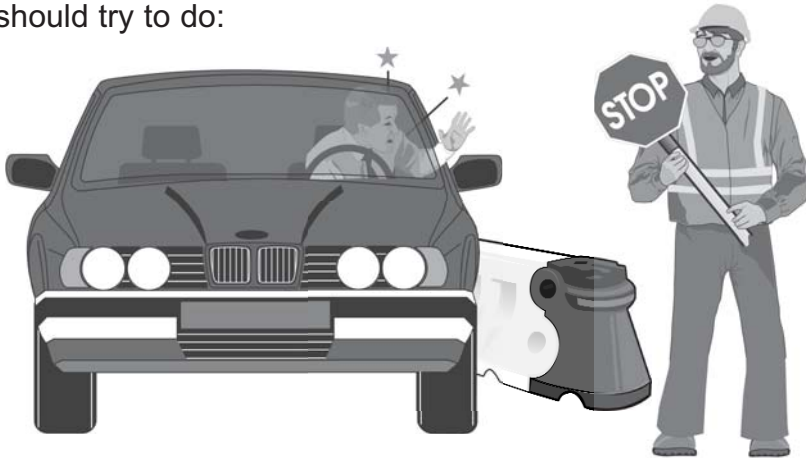
10 MINUTE
DELAY AHEAD

  - Flashing vehicle lights.
  - Truck/trailer-mounted attenuators.

How Do We Deal with an Angry Public?

Some members of the public may lose control of their emotions. Here are some things you and your employer should try to do:

- Stay calm and respond in a nonviolent manner.
- Keep yourself visible and in well lit areas.
- Make sure you can communicate with co-workers and call for help.
- Make allowances for quick egress.
- Create procedures to report violence to employers so they know trouble spots.
- Respond to public violence immediately. Provide workers with a means to record events, attackers, license tag numbers, and so on.
- Provide extra police protection and security when necessary.
- Provide positive separation between workers and motorists, whenever feasible.

Notes