Mobile Barrier Trailer
Protecting our employees
History

- Born out of the need to protect employees working on highways (June 2004)
- 4 years of research and development
- Manufacture and deployment of the Mobile Barrier Trailer
What is the Mobile Barrier?

- It is a trailer barricade, towed behind a tractor, that can be deployed to almost any work zone.
- Towed length can vary, but is usually hauled in its shortest configuration (approximately 42 feet).
- Can have sections added to it to increase the protected work zone to 100 feet.
- Can be configured to perform positive protection on either side of the road.
- Can be outfitted with a variable message sign (VMS), radar, work zone lights, and crash attenuator cushion.
A CDOT Maintenance Crew using the Mobile Barrier Trailer at night on a project.
Mobile Barrier Trailer in stowed mode
Mobile Barrier Trailer in stowed mode

The Mobile Barrier is set up for a right lane closure in this configuration.
The Mobile Barrier is set up for a right lane closure in this configuration. Additional sections can be added here to increase the work zone area.
Rear of the Mobile Barrier
Rear of the Mobile Barrier

Crash attenuator cushion in travel mode
Rear of the Mobile Barrier

Crash attenuator cushion in travel mode
Variable Message Sign (VMS) in travel mode
The trailer offers numerous electrical connections, lights, and a compressor to perform many maintenance activities.
Wall sections of the Mobile Barrier Trailer

The wall sections can be hauled this way to the work zone.
MBT – Interesting

- 42 ft. to 102 ft. of positive protection
- Trailer and tractor – 65,000 lbs
- 0–3 wall sections – 5000 lbs each
- 2 ballast boxes – 7500 lbs each
Switching from right lane to left lane
Switching from right lane to left lane

Removal of the crash attenuator cushion

Monday, March 11, 13
Switching from right lane to left lane

Removal of the crash attenuator cushion

Monday, March 11, 13
Switching from right lane to left lane

Removal of the crash attenuator cushion

Removal of the VMS and wheels

Monday, March 11, 13
Switching from right lane to left lane

Removal of the crash attenuator cushion

Removal of the VMS and wheels
Switching from right lane to left lane

- Removal of the crash attenuator cushion
- Removal of the VMS and wheels
- Re-assemble on the other end of the trailer. Approximately 30 minutes to turn around.

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Adding a section to the Mobile Barrier

Use of a front-end loader to accomplish the task. This can be done at a shop or in the field.
Deploying the crash attenuator cushion and V.M.S.
Mobile Barrier in action!

The Maintenance Crew in total protection from traffic.
Other uses for the Mobile Barrier

Mobile Barrier Trailer

Patching & Repair

Ramp Closure (accident & fire)

Night Work (w/ passing traffic)

Monday, March 11, 13
Typical Applications: TA-5 Shoulder Closure on Freeway
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Figure 6H-5. Shoulder Closure on Freeway (TA-5)

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Barrier and lights optional

Crash cushion (see Section 6F:62)

150 m (500 ft)

A

B

NEXT X MILES

NEXT X km

RIGHT SHOULDER CLOSED

1000 FT OR 300 m

ROAD WORK AHEAD

Design by GP

Typical Application 5

Typical Application 5

Figure 6H-5. Shoulder Closure on Freeway (TA-5) Modified With Mobile Barrier

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Mobile Barrier and lights optional

Crash cushion (see Section 6F:62)

150 m (500 ft)

A

B

NEXT X MILES

NEXT X km

RIGHT SHOULDER CLOSED

1000 FT OR 300 m

ROAD WORK AHEAD

Typical Application 5
TA-30 Interior Lane Closure on Multi-Lane Street
TA-30 Interior Lane Closure on Multi-Lane Street

Figure 6H-30. Interior Lane Closure on Multi-lane Street (TA-30)

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

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Typical Application 30

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TA-33 Stationary Lane Closure on Divided Highway
Figure 6H-33. Stationary Lane Closure on Divided Highway (TA-33)

Modified With Mobile Barrier

Typical Application 33

LONG-TERM AND INTERMEDIATE

SHORT-TERM

LONG-TERM AND INTERMEDIATE

SHORT-TERM

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
TA-35 Mobile Operation on Multi-Lane Road
TA–37 Double Lane Closure on Freeway
TA-37 Double Lane Closure on Freeway

Figure 6H-37. Double Lane Closure on Freeway (TA-37)

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Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
TA-38  Interior Lane Closure on Freeway

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TA-38 Interior Lane Closure on Freeway

Figure 6H-38. Interior Lane Closure on Freeway (TA-38)

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
Mobile Barrier
Mobile Barrier

Questions?
Mobile Barrier

- Questions?
- Comments?
Mobile Barrier

- Questions?
- Comments?
- Concerns?
Mobile Barrier

- Questions?
- Comments?
- Concerns?
- Jokes?
  - Good?
  - Bad?
Mobile Barrier

- Questions?
- Comments?
- Concerns?
- Jokes?
  - Good?
  - Bad?
- Thank you!