



**COLORADO**  
Department of Transportation

# **COLORADO DEPARTMENT OF TRANSPORTATION**



## **Engine Brake/Noise Ordinance**

## **Sign Warrant**

2023 Edition

## Acknowledgements

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Colorado Revised Statute 42-4-225.

FHWA Manual on Uniform Traffic Control Devices (2009).

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## Introduction

This document is intended to serve as a guide for the placement of Engine Brake/Noise Ordinance signs. The Colorado Department of Transportation (CDOT) typically does not allow the installation of traffic signs on state highways that have not proven to be effective. However, CDOT has chosen to work with counties and cities to allow limited use of Engine Brake/Noise Ordinance signs on state highways under certain conditions, despite the lack of evidence that they are effective in reducing engine brake noise. Engine Brake/Noise Ordinance signs shall not be installed on freeways or interstates. It is preferred to only place these signs at the city limit or county limit. Reminder signs may be placed at other locations if they meet warrants and are approved by the Region Traffic Engineer (RTE).

## Sign Guidance

The local agency requesting an Engine Brake/Noise Ordinance sign shall submit an Engine Brake/Noise Ordinance Sign Request form (Appendix A) with documentation from the local law enforcement committing to enforce the ordinance to the RTE for review. The RTE may install one R52-7a sign in each direction on the state highway at the city limit or county line. For municipalities that have an engine brake ordinance in place, sign R52-9a may be used as a supplement below R52-7a. Additional reminder signs may be installed at a minimum distance of 10 miles if the following conditions are met:

- The requested state highway is considered a Highway Freight Corridor as shown on Colorado's Freight Network Map located in Colorado's Freight Plan and is not a freeway or interstate. (<https://www.codot.gov/performance/assets/march-2019-colorado-freight-plan.pdf>)
- At least three of the following conditions are met.
  - Downgrade<sup>1</sup> in the segment of the state highway is:
    - 5% for more than 3,000 feet in length,
    - 6% for more than 2,000 feet in length,
    - 7% for more than 1,000 feet in length,
    - 8% for more than 750 feet in length, or
    - 9% for more than 500 feet in length.
  - Residential<sup>2</sup> housing development adjacent to the state highway is within 1,000 feet and the residential housing development is spaced on average less than 200 feet apart on either or both sides of the state highway.
  - Percentage of trucks is at least 15% or a percentage set by the RTE.
  - A 15 mph step down in speed limit.

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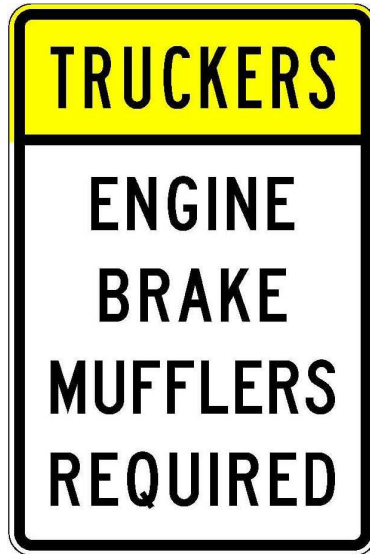
<sup>1</sup> Downgrade values used are from MUTCD section 2C.16 guidance for hill signs.

<sup>2</sup> Values used from definition of semi-urban district in Wisconsin Department of Transportation engine brake signing guidance.

## Sign Placement

It is preferred to only install R52-7a "Truckers Engine Brake Mufflers Required" signs on the state highway at the city, town, or county limit. Reminder signs may be placed at other locations if they meet conditions listed in sign guidance and have been approved by the Region Traffic Engineer.

For locations that have a local noise ordinance in place, sign R52-9a may be used as a supplemental sign below sign R52-7a.



R52-7a



R52-9a

R52-7 "Truckers - Engine Brake Mufflers Required \$500 fine" may be installed on state highways near the state line.



R52-7

## **Appendix A: Engine Brake/Noise Ordinance Sign Request Form**

# CDOT's ENGINE BRAKE/NOISE ORDINANCE SIGN REQUEST FORM

The Colorado Department of Transportation (CDOT) typically does not allow the installation of traffic signs on state highways that have not proven to be effective. However, CDOT has chosen to work with counties and cities to allow a limited use of Engine Brake/Noise Ordinance signs on state highways under certain conditions. It is preferred to only place these signs at the city limit or county line and reminder signs may be placed at other locations if they meet warrants and are approved by the Region Traffic Engineer. Meeting warrants does not guarantee a sign will be installed. This sign request form must be submitted by the local agency representative.

Due to sign effectiveness being highly dependent on enforcement, documentation from the local law enforcement committing to enforcing the ordinance must be submitted with this form.

## Local Agency Representative Contact Information

Name: \_\_\_\_\_ Email: \_\_\_\_\_ Phone Number: \_\_\_\_\_

## Location Description

County/City: \_\_\_\_\_ State Hwy: \_\_\_\_\_ Mile Post: \_\_\_\_\_

Is this a designated truck route <sup>1</sup> ?		Does the county/city have a noise ordinance? If yes, please submit a copy of the noise ordinance with your request. A noise ordinance example is included on page 2.
Yes	No	
		Yes      No

## Site Description

Speed Limit: \_\_\_\_\_ Percent Grade: \_\_\_\_\_ Length of Hill: \_\_\_\_\_ Is there a speed reduction of 15 mph within 1,000 ft?  
Yes      No

## Residential Development

Housing Density: \_\_\_\_\_ Average Distance from Highway: \_\_\_\_\_

## Traffic Information<sup>2</sup>

Annual Average Daily Traffic (AADT): \_\_\_\_\_ Percent Trucks: \_\_\_\_\_

## Comments

<sup>1</sup> Use CDOT's Map of Colorado's Multimodal Freight Network in the Colorado Freight Plan to determine if the requested location is a designated truck route (<https://www.codot.gov/performance/assets/march-2019-colorado-freight-plan.pdf>).  
<sup>2</sup> Use CDOT's Online Transportation Information System (<https://dtdapps.coloradodot.info/otis/TrafficData#ui/1/1/0>) for traffic information.

## Noise Ordinance Example

Sec. 13.3.4. – Use of engine Brakes Prohibited.

- (1) *Prohibited use of engine brakes.* The use of engine brakes shall be prohibited within the Town Boundaries, including along U.S. Highway 160 within Town boundaries. Engine brakes may be used only in emergency or life/safety situations. Such situations include: pedestrians hastily entering crosswalks, cars hastily veering or stopping in front of trucks, oversized loads and other road conditions that may create hazardous driving conditions.
- (2) *Posted signage.* The town shall erect, or cause to be erected, street signage that identifies this Section's requirement in the Municipal Code.





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