



## Economic Impact Analysis Virginia Department of Planning and Budget

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**16 VAC 25-96 – Reverse Signal Procedures – Existing General Industry/Construction Industry Standards, -- Off-Road Vehicles/Equipment**  
**Department of Labor and Industry**  
May 18, 2007

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### **Summary of the Proposed Regulation**

The Safety and Health Codes Board (Board) proposes to amend reverse signal safety procedures for general industry and construction vehicles, machinery and equipment (for vehicles/machinery/equipment built without unobstructed rear views).

### **Result of Analysis**

The benefits likely exceed the costs for this proposed regulatory change.

### **Estimated Economic Impact**

Current regulations mandate that construction and general industry vehicles/machinery/equipment (covered vehicles) not be operated in reverse without either sounding an audible alarm (loud enough to be heard over ambient noise) or having a trained designated observer who will ensure that the covered vehicle can safely reverse.

These proposed regulations will require that, with several exceptions, all covered vehicles sound an audible alarm (loud enough to be heard over ambient noise) **and** be guided by a trained designated observer. Reversing covered vehicles will not have to be guided by a trained ground observer if 1) these vehicles are equipped with video or similar technology capable of providing the driver with a unobstructed rear view or 2) the driver “visually determines from outside the vehicle that no employees are in the backing zone and that it is reasonable to expect that no employees will enter the backing zone during the reverse operation of the vehicle”. Reversing covered vehicles will not have to sound an audible alarm if they are not equipped with a reverse signal alarm. In addition to these exceptions, these proposed regulations stipulate that “to the

extent that any federal Department of Transportation (DOT) regulation applies to covered vehicles (and) conflicts ..., the DOT regulation shall take precedence”.

The Department of Labor and Industry (DOLI) reports that 136,222 businesses (136,000 small businesses) will be affected by these new regulations; DOLI has no information on the number of these businesses that 1) currently just have covered vehicles sound an audible signal when reversing, 2) currently just have a trained designated observer guide reversing covered vehicles or 3) currently use both covered vehicles with audible reverse signals **and** have a designated observer for reversing vehicles. Businesses that fall under category 3) will not incur any extra costs since they are already in compliance with these proposed regulations. Businesses that fall under category 2) are unlikely to incur any additional costs on account of the proposed regulations since the vehicles they use very likely would not be equipped with an audible reverse signal alarm. These businesses will be free to continue only using a trained designated observer.

Businesses that fall under category 1) will incur minimal costs for training employees on the requirements of the proposed regulation. These businesses will also incur some opportunity costs since employees who are acting as designated observers cannot complete other tasks (during the times they are watching reversing covered vehicles). DOLI estimates that employee training will take between 15 and 30 minutes and can likely be done during already regularly occurring “toolbox” meetings (meetings held informally on site at the beginning of the workday or shift).

These minimal costs are likely less than the benefits that will likely be realized because of the proposed regulations. DOLI reports that, in every year but one (1994) between 1992 and 2005, at least one person has died in an accident that involved a reversing covered vehicle. Deaths like these, as well as injuries, will be less likely if ground observers make sure that nobody is in the path of reversing vehicles.

## **Businesses and Entities Affected**

DOLI reports that 136,222 businesses (136,000 small businesses) will be affected by these new regulations.

## **Localities Particularly Affected**

No locality will be particularly affected by these proposed regulations.

## **Projected Impact on Employment**

The requirements of these proposed regulations are minimal enough that they will likely not affect employment at regulated businesses.

## **Effects on the Use and Value of Private Property**

The costs associated with these regulations are likely too minimal to adversely impact the value of affected businesses.

## **Small Businesses: Costs and Other Effects**

Approximately 136,000 small businesses will be affected by these proposed regulations. An unknown percentage of these businesses will incur (likely minimal) costs for training employees to act as designated observers and for the employee time that is spent observing reversing vehicles.

## **Small Businesses: Alternative Method that Minimizes Adverse Impact**

There are likely no alternative methods to accomplish the Board's goal that would be less costly than the methods mandated by these proposed regulations.

## **Legal Mandate**

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.H of the Administrative Process Act and Executive Order Number 21 (02). Section 2.2-4007.H requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, Section 2.2-4007.H requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a

description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.