



Senate Fiscal Agency
P.O. Box 30036
Lansing, Michigan 48909-7536



BILL ANALYSIS

Telephone: (517) 373-5383
Fax: (517) 373-1986

Senate Bill 43 (Substitute S-1 as passed by the Senate)
Sponsor: Senator John Cherry
Committee: Transportation and Infrastructure

Date Completed: 5-9-23

RATIONALE

According to testimony before the Senate Committee on Transportation and Infrastructure, there are three to four construction worker deaths on roadways in Michigan annually. The Michigan Transportation Asset Management Council forecasts a decline in statewide road conditions over the next decade, which increases the need for road construction projects. These projects, especially in urban areas, create greater traffic congestion and may frustrate commuters. To alleviate traffic delays during busy times, some road repair crews have begun to work at nighttime; however, reduced visibility and higher rates of inebriated driving at this time may increase the risk of worker fatality. Some people believe that introducing more road construction safety measures would reduce the number of deaths, a goal supported by the Michigan Department of Transportation's (MDOT) Toward Zero Deaths safety campaign. Accordingly, it has been suggested that MDOT be required to follow certain safety measures when closing a freeway for construction.

CONTENT

The bill would amend Public Act 165 of 1917, which governs the placement of suitable barriers during the closure of highways for improvement or repair, to do the following:

- Require MDOT to use concrete barriers or equivalent crashworthy temporary traffic barriers when closing a freeway or a portion of freeway for construction, improvement, or repair.**
- Specify that the requirement would not apply if the freeway or portion of freeway were closed for not more than three days for an emergency repair, utility crossing, maintenance, or other short-duration operation.**
- Allow MDOT to exercise its engineering judgement in designing and placing concrete barriers or equivalent crashworthy temporary traffic barriers and associated traffic control devices for each closure of a freeway or portion of freeway.**

Under the Act, officials in charge of constructing, improving, or repairing highways may close any highway or portion of highway for those purposes. The highway or portion of highway may not be closed until suitable barriers have been erected at the ends of the closed highway or portion of highway, and at the point of intersection of the closed highway or portion of highway. The Act specifies that suitable barriers include those that conform to the Manual of Uniform Traffic Control Devices adopted under Public Act 300 of 1949. The bill would delete the provision concerning suitable barriers and would subject the other provisions to the requirements described below.

Under the bill, except as otherwise provided, if MDOT closed any freeway or portion of freeway under its jurisdiction for construction, improvement, or repair of that freeway, a portion of

freeway, or a bridge located upon that freeway or portion of freeway, the following would apply:

- If the freeway were closed completely to traffic, it would have to be closed using concrete barriers or equivalent crashworthy temporary traffic barriers; ramp access could be closed with barricades, concrete barriers, or other equivalent crashworthy temporary traffic barriers to maintain access for construction traffic and emergency services.
- If the freeway were not closed completely to traffic and a portion of the freeway was closed at any time between a half hour after sunset to a half hour before sunrise for work scheduled to be done at that time in a contract between a contractor and MDOT, concrete barriers or equivalent crashworthy temporary traffic barriers would have to separate any road workers who were performing work from traffic.

The bill specifies that the provisions above would not apply if the freeway or portion of freeway were closed for not more than three days for an emergency repair, utility crossing, maintenance, or other short-duration operation.

The bill would allow MDOT to exercise its engineering judgement in designing and placing concrete barriers or equivalent crashworthy temporary traffic barriers and associated traffic control devices for each closure of a freeway or portion of freeway to account for site-specific conditions, including, but not limited to, roadway grade, equipment malfunctions, emergency service, law enforcement needs, crash history, or work duration. If the engineering judgement determined that the use of concrete barriers would cause additional risks for road users, additional safety measures to protect road workers would have to be included in the contract between the contractor and MDOT.

The bill would define "crashworthy" as that term as defined in the Michigan Manual on Uniform Traffic Control Devices: a characteristic of a roadside appurtenance that has been successfully crash tested in accordance with a national standard such as the National Cooperative Highway Research Program Report 350, "Recommended Procedures for the Safety Performance Evaluation of Highway Features." "Suitable barrier" would mean a barrier that conforms to the Michigan Manual on Uniform Traffic Control Devices. "Michigan Manual on Uniform Traffic Control Devices" would mean the Manual on Uniform Traffic Control Devices adopted under Section 608 of the Michigan Vehicle Code.

"Freeway" would mean that term as defined in Section 18a of the Michigan Vehicle Code: a divided arterial highway for through traffic with full control of access and with all crossroads separated in grade from pavements for through traffic. "Highway" would include roads and streets.

MCL 247.291 et al.

PREVIOUS LEGISLATION

(Please note: This section does not provide a comprehensive account of all previous legislative efforts on the relevant subject matter.)

The bill is similar to Senate Bill 887 from the 2021-2022 Legislative Session.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

Codifying the bill's safety measures, such as requiring MDOT to close a freeway for construction using concrete barrier or other crashworthy traffic barriers, would protect road

workers. In 2022, there were 4,393 crashes in Michigan’s construction, maintenance, and utility work zones, resulting in 13 fatalities and 862 injuries.¹ According to MDOT, five road workers were killed and three injured in just three months during fall 2020.² People should not be killed just because they come to work. Additional safety measures to protect road workers should be instituted.

Barriers serve a variety of protective purposes. Their presence cautions drivers entering a construction zone, marks safe driving paths, and prevents vehicles from entering work zones. Crashworthy barriers can resist the force of a low-speed collision, slowing a vehicle and potentially allowing an individual to move out of its path before being hit.³ Requiring MDOT to use crashworthy barriers would help protect road workers from injury and death.

Opposing Argument

Codifying the bill’s safety measures into law may provide the State an unnecessary cost, as MDOT can already do what the bill proposes. Current law prohibits highway authorities from closing any highway or portion of a highway unless suitable barriers are erected at the ends of the highway or closed portion of the highway, as well as at any intersection with another highway. If MDOT considered more barriers necessary, nothing prohibits it from erecting them. Forcing these barrier requirements into law when MDOT may already implement them would be superfluous and costly.

Response: Though requiring that MDOT place these barriers may incur additional costs, the State has a responsibility to protect its citizens and workers. It should not be deterred by the cost of additional safety measures. Additionally, statutorily requiring MDOT to comply with specific safety measures would ensure continuity between administrations.

Legislative Analyst: Abby Schneider

FISCAL IMPACT

The bill would have an indeterminate fiscal impact on the State and no fiscal impact on local governments. The bill could result in increased costs to the State if the costs of the barrier materials were more expensive, or the barriers themselves were more expensive to install and uninstall, than previous materials used. However, the bill could result in a decreased cost to the State if fewer accidents and worker injuries or deaths occurred.

Fiscal Analyst: Robert Canell

¹ "Fast Facts", www.michigan.gov/mdot. Retrieved 5-8-2023.

² Serrano, Maria, "Michigan State Police investigating construction worker death, legal experts weigh in", *News Channel 3*, Aug. 28, 2021.

³ "The importance of barricades in construction", www.trafficsafetyzone.com. Retrieved 5-8-2023.