

Teton Pass vehicle arrestor system



Alternatives to the arrestor

Generally there are two types of emergency escape ramps: sandpile and arrestor bed.

Sandpile type ramps

-sand loosely dumped at the end of a sloping surface

Why it's not the best fit

Vehicle deceleration is severe and the density of the sand pile can be affected by weather. Sandpile type ramps are the least favorable type of escape ramps due to the sudden deceleration of the driver. In addition, the current sandpile type ramp on WYO 22 forces the user to cross into oncoming traffic, forcing out of control vehicles into oncoming traffic.



The old sandpile ramp on WYO 22, Teton Pass.

Gravel arrestor bed

-an arrestor bed filled with gravel

Why it's not the best fit

When a vehicle uses a gravel filled bed, there is the hazard of flying debris contacting drivers or nearby landowners.

In order to properly provide a gravel bed on WYO 22, in which a vehicle does not have to cross oncoming traffic, a lengthy, downward grade arrestor would be required. The alignment of the arrestor would need to be straight or on a very flat horizontal curve to minimize the driver's difficulty of controlling the vehicle. WYO 22 is located on a mountainous pass with frequent curves and where tangent sections of roadway are shorter than the length needed for this type of arrestor.

Why not eliminate trucks from using the pass?

The Wyoming Department of Transportation's mission is to provide a safe, high quality and efficient transportation system to its users. Part of this system is Wyoming State Highway 22, Teton Pass.

Considering that one of the primary functions provided by a highway is the movement of goods, WYDOT is committed to accommodating trucks to the maximum extent feasible. Routes such as WYO 22 are critical to the economic vitality of local areas, the region, the state, and the country.

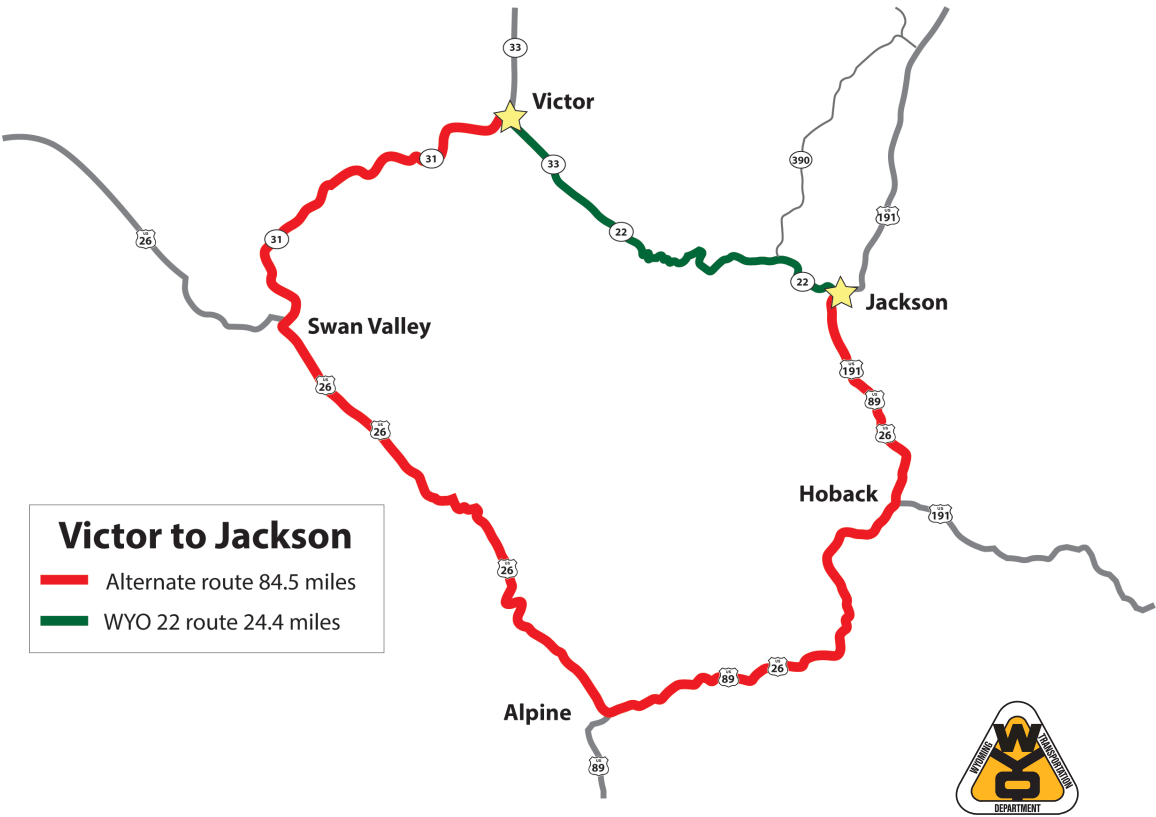
This route is critical since alternate routes are many miles and several hours longer, which is inefficient for the movement of goods and services.

Currently, the distance from Victor, ID to Jackson, WY over Teton Pass is 24.4 miles. If a closure

was enforced, the detour through the Swan Valley on US 26 would triple the distance to 84.5 miles. Due to these reasons, a complete ban on all tractor trailers has not been pursued by WYDOT at this time.

WYDOT took a comprehensive approach to developing a proposed solution for addressing safety on Teton Pass. Not all crashes that take place on Teton Pass involve overweight trucks. There are overweight vehicles, vans, RVs, cars, pickup trucks, and more that have lost control or have the potential to lose control due to the steep grades and sharp curves.

Therefore, the issue of runaway vehicles is not just limited to semi trucks; although these types of vehicles may be more likely to have a problem. WYDOT took into consideration that the proposed solution would also have to accommodate or be useful to other users, such as commuters.



Other ways WYDOT has addressed runaway vehicles on Teton Pass



- Implemented a weight restriction of 60,000 lbs. gross weight and seasonal closure for all trailer traffic between Nov. 15 and April 1. Signs were installed in Rigby and Driggs, Idaho, to alert drivers of the imposed restriction.
- Installed numerous grade warnings and weight restriction devices.
- Installed static signs, static signs with flashing beacons and dynamic message signs located in Victor, Idaho and Swan Valley, Idaho.
- A scale and scale house were installed on the west side of Teton Pass as you enter Wyoming from Idaho. This location is unmanned and used by patrol on a limited basis.
- Three speed detection and flashing beacon warning signs were installed from milepost 9 to milepost 10. At these locations, the devices will flash when vehicles travelling at more than 45 mph pass through the radar detection area, thus notifying the driver to slow down.
- On top of the pass at approximately milepost 11, there is a pullout for drivers to check their brakes before descending toward Wilson.
- A "Weight-In-Motion" scale and warning signage was installed to warn vehicles in advance of the pass.
- Warnings have also been added to various web based routing systems like Google Maps.
- Brochures and posters illustrating the restrictions and safety concerns for trucks were distributed through local trucking associations and online at www.wyoroad.info.