



# 129,000 Pound Evaluation of SH-72

## SH-72 MP 0.0 to MP 1.99

(Case #201711SH-72)

### Executive Summary

Arlo G. Lott Trucking, Inc. submitted a request for 129,000 pound trucking approval on SH-72 between US-30 at milepost (MP) 0.0 and connecting to SH-52 at MP 1.99. The requestor will transport lumber from Emmett to US-95 near Fruitland. This section of SH-72 is designated a “red route” requiring all trucks to adhere to 6.5-foot off-track and 115-foot overall vehicle length criteria. ITD Bridge Section evaluated the single bridge on requested section of highway and confirms it is capable of supporting 129,000 pound vehicles. District 3 evaluation describes the route as asphalt pavement in good condition with no deficient sections. The Office of Highway Safety analysis shows this section of SH-72 has no Non-Interstate High Accident Intersection Locations (HAL) and has no HAL clusters. Division of Motor Vehicles, Bridge Asset Management, Highway Safety and District 3 and all recommend proceeding with this request.

### Detailed Analysis

#### **Division of Motor Vehicles (DMV) Review**

All Idaho Transportation Department routes are currently categorized by their ability to handle various extra-length vehicle combinations and their off-tracking allowances. The categories used when considering allowing vehicle combinations to carry increased axle weights above 105,500 pounds and up to 129,000 pounds are:

- Blue routes at 95 foot overall vehicle length and a 5.50-foot off-track
- Red routes at 115 foot overall vehicle length and a 6.50-foot off-track.

Off-tracking is the turning radius of the vehicle combination, which assists in keeping them safely in their lane of travel. Off-tracking occurs because the rear wheels of trailer trucks do not pivot, and therefore will not follow the same path as the front wheels. The greater the distance between the front wheels and the rear wheels of the vehicle, the greater the amount of off-track. The DMV confirms that the requested route falls under one of the above categories and meets all length and off-tracking requirements for that route. **More specifically, the requested section of SH-72 from MP 0.0 to MP 1.99 is designated as a red route and as such all trucks must adhere to the 6.5-foot off-track and 115 foot overall vehicle length criteria.**

#### **Bridge Section Review**

Bridges on all publicly owned routes in Idaho, with the exception of those meeting specific criteria, are inspected every two years at a minimum to ensure they can safely accommodate vehicles. A variety of inspections may be performed including routine inspections, in-depth inspections, underwater inspections, and complex bridge inspections. All are done to track the current condition of a bridge and make repairs if needed.





When determining the truck-carrying capacity of a bridge, consideration is given to the types of vehicles that routinely use the bridge and the condition of the bridge. Load limits may be placed on a bridge if, through engineering analysis, it is determined the bridge cannot carry legal truck loads.

ITD Bridge Asset Management has reviewed the single bridge pertaining to this request and has determined it will safely support the 129,000-pound truck load, provided the truck’s axle configuration conforms to legal requirements. To review load rating data, see the Bridge Data chart below.

### District 3 Evaluation

This segment has been evaluated and the District recommends proceeding.

District Three has evaluated the roadway characteristics, pavement condition, and traffic volumes on SH-72 between MP 0.00 and MP 1.99 in response to the request to make this segment a 129,000-pound trucking route and recommends proceeding with the request.

### Roadway Characteristics

This roadway is a straight, two-lane, rural connector running through agricultural lands. The roadway geometry is outlined in the table below.

*Table 1. SH-72 Roadway Geometry*

Mileposts	Lane Width (ft)	Right Paved Shoulder Width (ft)	Parking Width (ft)
0.0 – 1.99	12.00	1	0

### Pavement Condition

The road is asphalt pavement and is rated good on both sections. It is not considered deficient in cracking, rutting or ride. Spring breakup limits do not pertain to these sections at this time.

*Table 2. 2016 TAMS Visual Survey Data*

Mileposts	Pavement Type	Deficient	Condition	Cracking Index	Roughness Index	Rut Avg (in)
0.000 - 1.99	Flexible	No	Good	4.50	3.87	0.13

### Traffic Volumes

The speed limit on this section of highway is 55 miles per hour, and there are no stop lights. The traffic volumes are provided below.

*Table 3. 2016 Traffic Volumes*

Mileposts	AADT	CAADT	% Trucks	Speed Limit
0.000 - 1.989	2550	130	5%	55

AADT – Annual Average Daily Traffic

CAADT – Commercial Annual Average Daily Traffic

### Truck Ramps

No runaway truck ramps exist due to the flat nature of the roadway.





### **Port of Entry (POE)**

The POE does not maintain any rover sites on these sections of highway.

### **Highway Safety Evaluation**

This SH-72 section has no Non-Interstate High Accident Intersection Locations (HAL) and has no HAL clusters.

Analyses of the 5-year accident data (2012-2016) shows there were a total of 15 crashes involving 25 units (0 fatalities and 11 Injuries) on SH-72 between MP 0.0 and MP 1.99 (US 30 to SH 52) of which one crash involved a tractor-trailer combination. The crashes involving a tractor trailer had a contributing circumstance of failure to yield. One possible injury and no fatalities resulted from the crash involving a tractor trailer. Implementation of 129,000 pound trucking is projected to reduce truck traffic on this route.





**Additional Data:**

***Bridge Data:***

**Route Number:** SH 72  
**Department:** Bridge Asset Management  
**Date:** 12/27/2017

<b>Route</b>	<b>From:</b>	Hamilton Corner, ID
	<b>Milepost:</b>	0.00
	<b>To:</b>	near New Plymouth, ID
	<b>Milepost:</b>	1.99

<b>Highway Number</b>	<b>Milepost Marker</b>	<b>Bridge Key</b>	<b>121 Rating<sup>a</sup> (lbs)</b>
72	0.34	15210	178,000

<sup>a</sup>: The bridge is adequate if it has a rating value greater than 121,000 pounds or is designated as "OK EJ" (okay by engineering judgment).

