



# 129,000 Pound Evaluation of US-26 M.P. 272.0 to M.P 276.53 (Case #201616US26D6)

## Executive Summary

Handy Truck Line, Inc. submitted a request for 129,000 pound trucking approval on US-26 between milepost (MP) 272.0 and MP 306.104 for transportation of cement which is divided between ITD Districts 5 and 6. This evaluation is for the District 6 segment covering MP 272.0 – MP 276.53. The request projects up to 20 trips annually which is a 15-25% reduction from current operations. This section of US-26 is coded a “Red Route,” where vehicles with 115-foot overall length and 6.5-foot off-track are authorized. ITD Bridge Section confirms there are no bridges on this section of highway. District and Materials section evaluations determined this section of roadway capable of handling 129,000 pound vehicles with no long term concerns. The Office of Highway Safety analysis shows this section of US-26 has no Non-Interstate High Accident Location (HAL) Intersections and no HAL Clusters. In addition, there are no local roads requests required with this application. Department of Motor Vehicles Services, Materials Section, Highway Safety, Bridge Asset Management and District 6 all recommend proceeding with this request.

## Detailed Analysis

### Department 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 US-26 from MP 272.0 to MP 276.53 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 Review

There are no bridges on this section of US-26.

## Materials Section Review

The Idaho Transportation Department's 129,000 pound pilot project report to the Idaho State Legislature in 2013 states, "For pavements, axle weight is a more significant determinant of pavement damage than gross vehicle weight. Truck weight limits that allow a higher GVW distributed over more axles do not necessarily lead to higher pavement costs and can even produce savings." Based on the increased number of axles required for 129,000 pound vehicles to maintain legal axle weights, the equivalent single axle loads (ESAL) for 129,000 pound vehicles are lower than for 80,000 pound and 105,500 pound vehicles. The implementation of the 129,000 pound configuration also reduces the number of truck trips compared to performing the same work with 80,000 or 105,000 pound trucks. The reduction in truck traffic further reduces the pavement wear. Therefore, for this section of roadway, our assessment is the increased vehicle weight with a corresponding increased number of axles will reduce loads per axle compared to 80,000 or 105,500 pound vehicles and thereby produce lower loads on the road surface and subsurface resulting in equal or lesser damage.

## ITD District Evaluation

This segment has been evaluated and the District recommends proceeding.

District evaluation of the roadway characteristics, pavement condition, and traffic volumes on US-26 between milepost 272.0 and 276.53 shows no concerns with this action and recommends proceeding. Details of the evaluation are provided below.

### Roadway Characteristics

This section of road is an undivided principle arterial with the roadway geometry is outlined in the table below.

*Table 1. US-26 Roadway Geometry*

	THROUGH LANES	TWO-WAY LEFT TURN LANE (TWLTL)	SHOULDER	PARKING LANE
272-276.53	2 – 1 each direction	No	Yes	No
	12'	-	4'	-

### Pavement Condition

The road is asphalt pavement and is in fair condition and is not deficient in cracking, roughness, or ruts. The entire section had a seal coat in 2014. Another seal coat is scheduled for 2022.

Spring breakup limits do not pertain to this section at this time.

*Table 2. 2015 TAMS Visual Survey Data*

MILEPOST	PAVEMENT TYPE	DEFICIENT (YES/NO)	CONDITION STATE
272.00 – 276.53	Flexible	No	Fair

### Traffic Volumes

The speed limit of this section of highway is 65 mph with commercial vehicle volumes of approximately 190 trucks daily near Atomic City.

### **Truck Ramps**

Due to the flat nature of this segment, no runaway truck ramps exist.

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

The POE maintains a rover site on this section of highway and conducts regular checks of the traffic.

### **Highway Safety Evaluation**

This US-26 segment has no Non-Interstate High Accident Location (HAL) Intersections and no HAL Clusters. Analyses of the 5-year accident data shows there were a total of five crashes with no fatalities and three injuries on US-26 between MP 272.0 and MP 276.53. No crashes involved tractor-trailer combinations. Implementation of 129,000 pound trucking is projected to reduce truck traffic on this route.