

City Staff Report

Report Date: June 1, 2018
Meeting Date: June 19, 2018

To: Mayor & Council
From: City Manager Byron Johnson
Subject: Allowing 9 Axle Trucks on Municipal Roads

Purpose

The City has been working on a request by the Forest Industry to allow the use of 9 axle trucks with increased weight allowances on selected City roads and bridges. The forest industry has two requests related to 9 axle trucks:

1. That the City would allow them on the road network which connects the mills to Hwy 97. This allows the mills to bring in logs from out of town for local processing.
2. That the City would allow these trucks on the Moffat Bridge, Johnston Bridge and Baker Creek Bridge, this allows heavier loads in from the bush.

The study of the actual bridge infrastructure (number 2 above) is ongoing, and will be coming back to Council for deliberation when completed. This report only deals with some of the connection roads in the Two Mile and Three Mile Flat industrial areas.

Summary

Rationale for Allowing 9 Axle Trucking Configurations:

The initiative to allow 9 axle trucks is a province-wide initiative being led by the forest industry, the benefits are as follows, according to FP Innovations, the consulting firm studying the issue on behalf of industry:

- The allowable maximum total loaded weight would increase from 63.5 tonnes to a maximum of 72.3 tonnes.
- Bumping the allowable weights will result in more volume per load hauled, resulting in lower cost hauling for the forest industry. This represents up to a 14% improvement to the weight of logs hauled per load.
- This configuration results in fewer loads hauled for a set volume of fibre. This improves the Green House Gas emissions as a result, reduces road dust from trucks, and reduces the chance of traffic incidents involving logging trucks.
- From the perspective of overall road safety, the addition of a ninth axle reduces the weight per axle resulting in the following impacts:
 - Truck stopping distance as good or better than other truck configurations
 - 5% less wear and tear to pavement than an 8 axle B train (currently allowed)
 - Less damage to resource roads
- MOTI requires that any new proposed truck configuration generates at least 5% less theoretical pavement impact than existing configurations before it can be considered for approval. The approved baseline truck used for comparison is an 8 axle, 63.5 tonne, tandem axle B train. This new configuration is in use in BC and passes that test.

Concerns with 9 Axle trucks:

- More weight is hauled over a set truck length, it is hard to estimate the damage to road infrastructure when the truck is starting, stopping & turning.



- The potential exists to have the bridges loaded to a weight factor that is 14% greater. It is generally accepted that heavier loads cause exponential damage to bridge and road infrastructure.
- Truck safety on in-block roads and resource roads is an issue which comes up when this topic is discussed. This is not an issue for the City to comment on, it is not within our purview.

Approval Process:

The use of these heavier trucks are approved on a route by route basis by MOTI and local government jurisdictions. Any bridge infrastructures are analysed individually to ensure they are suitable to carry the heavier load. After the municipal authority is satisfied that the infrastructure is adequate to carry the heavier loads, it signals its approval to MOTI who has the final approval authority.

Current Approval status:

9 Axle truck have been approved for a large number of roads directly north of Quesnel and an increasing number in Williams Lake and South. According to West Fraser, the wider approvals in PG have actually created a competitive advantage for Canfor and others. Currently Hwy 97 is approved from North (Mackenzie and Ft St James) and West (Smithers) of PG to Dunkley Lumber. MOTI cannot approve further South than Dunkley because there are no municipal roads that are approved in Quesnel, so these trucks if approved by MOTI would have no legal destination point. Council approval of municipal roads is the first step.

Approval Request by Industry Stakeholders:

The industry group is asking that Council approve the following routes in Quesnel for the 9 axle configurations:

- Quesnel Hixon Road – 875 meters in from Hwy 97
- Finning Road
- Carradice Road
- Brownmiller Road
- McLeod Avenue
- Rome Avenue.

ECOM considered this request, it is important to the community that local mills have every opportunity to bring in wood from outside of the Timber Supply Area. Local employment depends on the mills staying competitive. For these reasons the ECOM made the following recommendation:

That ECOM recommends to Council to approve the use of 9 axle truck configurations, with the allowable weights increases, for the following industrial roads in Quesnel: the first 875 meters of Quesnel-Hixon Road, Finning Road, Carradice Road, Brownmiller Road, McLeod Avenue and Rome Avenue.

Impact on Road Maintenance Costs

The overall impact on City roads is unknown at this point. Industrial roads, while built to a higher standard than regular City roads, have an accelerated replacement schedule due to the weights being hauled over them. If this increase to allowable weight accelerates the deterioration even further, the City should engage the industrial ratepayers regarding cost sharing for road replacement.

The counter argument to this is that this trucking configuration will result in lower axle loading due to the extra axle, and there will be less truck trips to haul the equivalent volume. Both of these suggest lower



road impacts. In addition, industrial ratepayers would likely argue that their higher relative taxation rates already account for items such as increased road maintenance.

This argument will be determined by what actually happens with our roadways. If the accelerated deterioration occurs, Staff suggests that cost sharing discussions with industry occur. As the tax setting body, Council has the discretion to ensure that cost sharing can occur if needed.

Recommendation

THAT Council approves the use of 9 axle truck configurations, with the allowable weights increases up to a maximum of 72.3 tonnes, for the following industrial municipal roads in Quesnel: the first 875 meters of Quesnel-Hixon Road, Finning Road, Carradice Road, Brownmiller Road, McLeod Avenue and Rome Avenue.

AND THAT Council directs staff to engage in a discussion regarding potential future cost sharing of road maintenance on these industrial roads, if their lifecycle is shortened due to heavier loads.

Statutory Requirements

There are no statutory requirements.

Council Policy

There are no applicable Council policies.

Strategic Objective

Changing the truck configurations will have a positive impact on GHG emissions and airborne particulate matter due to reduced truck trips. The impacts the Community Health and Safety strategic initiative.

Another strategic initiative is Economic Stability and Diversification of the community. If this initiative proceeds it lowers the transportation cost for the forest industry, this contributes to the Economic Stability of Quesnel.

Financial Implications

Road capital is one of the City's large costs. Arguably, proceeding with this initiative could increase this cost.

Attachments

Attached to this report is the following summarized overview of a detailed analysis conducted by FP Innovations. The more detailed scientific analysis is available for Council upon request.

1. Overview of the pavement impact analysis for two new 9 axle B-trains in BC, dated April 25, 2018 by FP Innovations.
2. Map of local road authorization request.

Concurrence

Matt Thomas, Director of PW Operations

Chris Coben, Director of Capital Works and Infrastructure

Options

Council has the option of approving or denying these changes to trucking configurations on municipal roads.