



Update to Implications of 9th Avenue North Truck Route Removal

Date	March 23, 2022
To	Executive Committee
From	Citizen Services
Service Area	Roadways & Transportation
Item No.	EX22-38

RECOMMENDATION

The Executive Committee recommends that City Council remove item MN20-23 from the List of Outstanding items for City Council.

ISSUE

On October 28, 2020, in response to motion MN20-23, City Council voted to remove the Heavy and Long Combination Truck Route (truck route) between 9th Avenue North between Pinkie Road and Pasqua Street North. This motion resulted in amendments to *The Regina Traffic Bylaw, 1997*, Bylaw No. 9900 (the "Traffic Bylaw").

This report responds to that motion, where Administration was requested to outline the one-year impacts resulting from the 9th Avenue North truck route removal in 2020.

IMPACTS

Policy/Strategic Impacts

Restricting the use of 9th Avenue North as a truck route adversely impacts the following economic and road network goals outlined within *The Official Community Plan, Bylaw No. 2013-48* (OCP):

Section D1, Goal 2 – Transportation, "Support regional economic growth through an effective and efficient transportation system".

- 3.3 Work with surrounding municipalities, the Province and other regional partners as necessary to ensure the efficient movement of people and goods within the region.
- 3.6 Participate where necessary in defining the location and accommodation of key transportation infrastructure associated with the effective movement of goods within the region in partnership with the Province, surrounding municipalities, and the Global Transportation Hub Authority.
- 3.7 Encourage the Province to upgrade strategic goods routes and commuter routes that serve the region.

Section D3, Goal 4 – Road Network Capacity, “Optimize road network capacity”

- 5.24 Provide a truck route network for the transportation of heavy, over-sized, and dangerous goods.

Restricting the use of 9th Avenue North as a truck route also adversely impacts *The Transportation Master Plan (TMP)*, where this road segment is part of the city wide “Strategic Goods Route”.

Sections of the TMP that are impacted include:

Section D7, Goal 31 – Goods and movement will be safe and efficient.

- 7.1 Work with the province, surrounding municipalities and regional partners to develop a regional truck route network. The network should identify municipal and regional roadways and will define:
 - Routes where dangerous goods are permitted.
 - Routes for pick-up and delivery vehicles.
 - Routes for heavy or long combination vehicles.
 - Truck route areas in industrial districts.
- 7.2 Ensure truck and dangerous goods routes are clearly signed to reduce infiltration into areas where these vehicles are permitted.

Environmental Impacts

City Council set a community goal for Regina to achieve net zero emissions and sourcing of net zero renewable energy by 2050. In support of this goal, City Council asked Administration to provide energy and greenhouse gas implications of recommendations for Council to evaluate the climate impact of its decisions. Maintaining Council’s decision to remove 9th Avenue North from the truck route results in higher greenhouse gas emissions related to the alternate routing of trucks which would ordinarily use 9th Avenue North. This impact will correspondingly increase with growth and demand near 9th Avenue North. Administration estimates that the use of alternative trucking routes generates an average increase of 340 tonnes of CO₂e annually. This is equivalent to increasing fuel use by 150,000 L per year or adding 90 vehicles to the road each year.

There are no financial, accessibility or other impacts regarding this report.

OTHER OPTIONS

Administration considered the option to reinstate the removed portion of 9th Avenue North as a truck route between Pasqua Street North and Pinkie Road. While reinstatement ultimately aligns with the goal of providing infrastructure that supports the efficient movement of goods and services, data suggest that the remaining truck route network has sufficiently absorbed the impacted truck traffic in 2021. As the city grows and trucking demand increases, Administration can bring forward future recommendations to reinstate or adjust trucking routes as needed.

COMMUNICATIONS

Administration regularly engages with representatives of industry stakeholders affected by the 9th Avenue North truck route removal. Representatives have been made aware of this report and will be notified should any changes to the Traffic Bylaw result.

DISCUSSION

Administration reviewed the removal of 9th Avenue North from the truck route to determine its impacts to the city's connectivity to other road networks, truck traffic volumes, road safety, community, local economy, and strategic policies. The discussion of this report outlines the main impacts that Administration reviewed, in addition to the future considerations for 9th Avenue North.

Purpose of Truck Routes

A truck route is a strategic selection of roadways established by the City through the traffic bylaw to allow for the movement of trucks in a safe and efficient manner, and which limits trucks on less suitable roads. Truck routes within the city also strive to support and maintain the economic and social wellbeing policies outlined within the City's Transportation Master Plan and Official Community Plan.

Truck routes provide a set path to move goods to businesses, industrial areas and ultimately to residents of the city. The efficient movement of trucks in and around a community supports both the local economy and resident needs. The successful removal or addition of a roadway to an established truck route should find a balance between satisfying resident concerns on trucking and maintaining an effective route for the economic wellbeing of the Regina region.

9th Avenue North Connectivity to Regina Bypass

9th Avenue North is a road that connects the Regina Bypass (Bypass) at the west city limits to the Ring Road at Pasqua Street North. In its current state, 9th Avenue North is the key connecting link between the provincial Bypass and the regional Ring Road networks.

As the city continues to grow and develop, 9th Avenue North will see road capacity improvements and will ultimately transition into an expressway road, characterized by free-flowing interchange connections that is consistent with the Ring Road. The Bypass is a highway network that surrounds the west, south and east city limits. The first segment is the continuation of Highway 11 along the west city limits. The second segment continues along the south and east city limits and is considered as the new Highway 1. Along both segments of the Bypass, there are major entry and exit points that provide direct access to the following city roads which include:

- 9th Avenue North
- Victoria Avenue
- Arcola Avenue (Highway 33)
- Albert Street (Highway 6)
- Ring Road/Highway 1A
- Rotary Avenue
- Dewdney Avenue

A map of all major Bypass entry and exit points, in addition to the City's existing truck routes are provided in Appendix A and C respectively.

Impacts of Removing the Truck Route

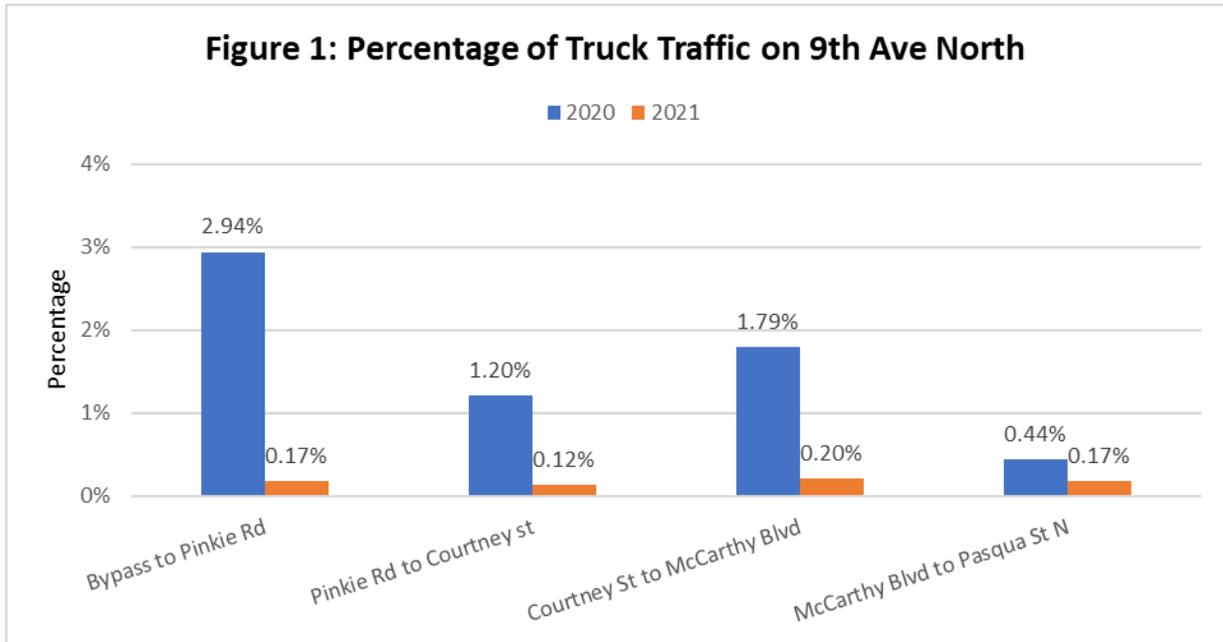
Upon Council's approval of the motion to remove 9th Avenue North from the truck route in December 2020, Administration carried out changes to the traffic bylaw and installed regulatory "Trucks Prohibited" signs. The Ministry of Highways also coordinated to have applicable advance notice signs installed along the Bypass at the approaches to 9th Avenue North.

In 2021, Administration gathered data along 9th Avenue North, Ring Road and Highway 1A to measure the subsequent changes to truck traffic compared with available data collected prior to removal.

9th Avenue North from Bypass to Pasqua St North

Analysis of the data indicated that 2020 truck volumes accounted for 1.59 per cent on average of vehicle traffic on this road segment. After the removal of this corridor from the truck route, the percentage of truck traffic dropped to 0.17 per cent on average of vehicle traffic.

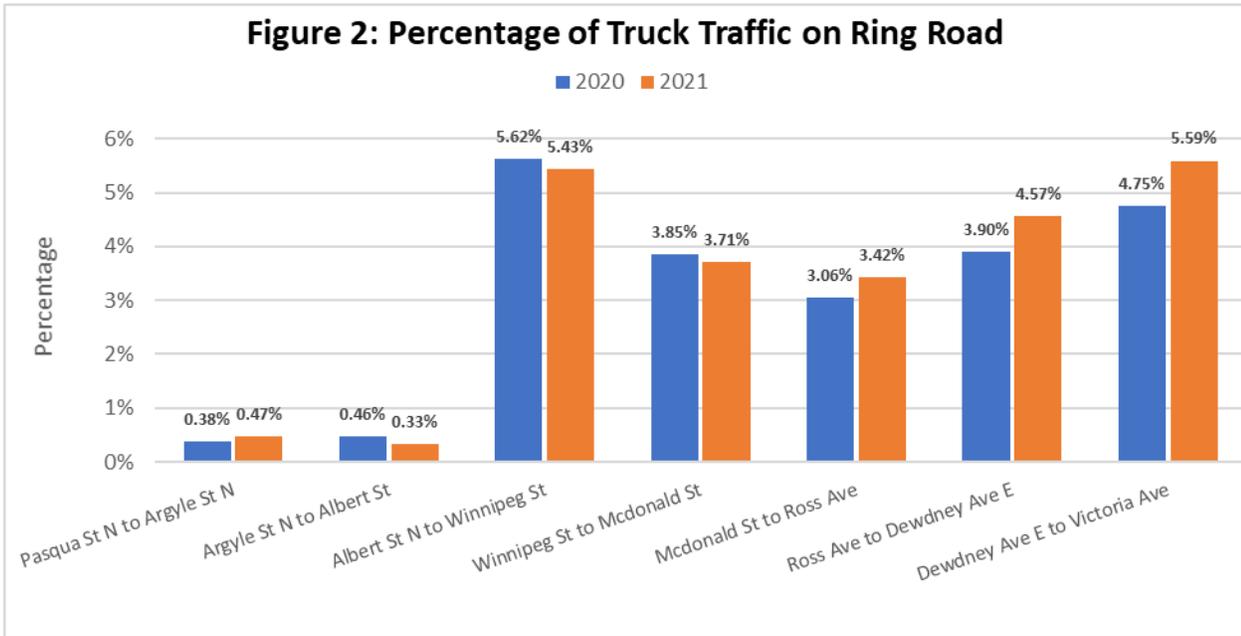
Figure 1 indicates the percentage of truck traffic for each individual road segment of the 9th Avenue North corridor for 2020 vs 2021.



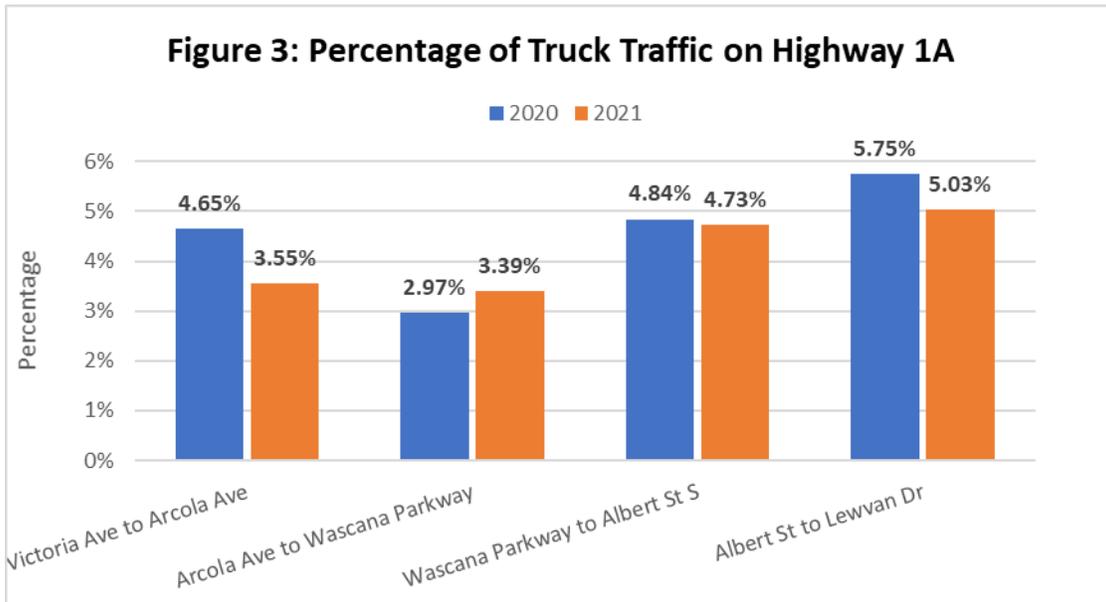
Data collection in 2020, prior to the truck route removal, indicated that the average volume of truck traffic between the Bypass and Pasqua Street on 9th Avenue North was 1.59 per cent. In 2021, the average percentage of truck traffic was 0.17 percent for the same corridor after the removal. This comparison indicates that there has been a noticeable decrease in the per cent volumes of truck traffic after this segment of 9th Avenue North was removed from the truck route. Remaining truck traffic may be occurrences of truck traffic that lawfully use 9th Avenue North or are authorized in accordance with the Traffic Bylaw, which is similar with other areas of the City. Any improper truck use of this small scale can be mitigated with continued enforcement and education.

Ring Road and Highway 1A

Administration carried out data collection on Ring Road and Highway 1A between Pasqua Street North to the south city limits. When comparing truck volumes between 2020 and 2021 on Ring Road, there was no significant change to truck traffic volumes along each major segment. The average percentage of truck traffic on Ring Road in 2020 was 3.15 per cent. In 2021, the average has increased by 0.21 per cent to 3.36 per cent with the largest increases on segments near the industrial area of the city. Figure 2 shows the truck percentage for each segment of Ring Road for 2020 vs 2021.



Similarly, along Highway 1A, Administration’s review of data did not indicate any significant impact on truck volumes when comparing 2020 vs 2021 data. In 2020, there was an average of 4.55 per cent of trucks on this segment compared with 4.17 per cent in 2021. Figure 3 shows the truck percentage for each segment of Highway 1A in 2020 vs 2021.



Compliance and Safety

As indicated by the significantly reduced truck volumes in 2021, most truck traffic has complied with the removal of 9th Avenue North from the truck route. It is important to note that of the 0.17 per cent average truck traffic remaining on 9th Avenue North, there may be a subset that is permissible under the traffic bylaw, which is a scenario consistent with other roads in the City.

Administration gathered vehicle speed data on 9th Avenue North in 2021 and determined the average 85th percentile speed for all traffic between Courtney Street and Pinkie Road was 80 km/h in 2021, which is a slight reduction compared to the average 85th percentile speed of 83 km/h in 2015 prior to the bypass's opening.

When considering truck traffic between Courtney Street and Pinkie Road, the average 85th percentile speeds decreased from 78 km/h in 2015 to 76 km/h in 2021. This indicates that while speeding is a concern on this section of road, neither the existence of the Bypass itself, nor the presence of truck traffic has substantively impacted the speeding behaviour. Further, data collected indicates that the majority of speed violations are passenger vehicles and not vehicles classified as trucks. Administration will continue to monitor speed and provide relevant information to Regina Police Service (RPS) to support its efforts for speed enforcement of vehicular traffic along 9th Avenue North.

Administration has also added 9th Avenue North to the Ring Road Safety Study that is currently underway. Consultant recommendations are expected in Q2 2022. Resulting recommendations without significant budget implications can be implemented in 2022 and changes which would require funding can be considered through future budget processes.

Community Impacts

Following the opening of the Bypass in 2019, residents of Westhill Park and neighbouring subdivisions raised concerns regarding the increase of traffic on 9th Avenue North from users of the bypass. The majority of the concerns regarding trucks included increased truck volumes, noise, and vibrations to the surrounding neighbourhood as well as safety and truck speeding issues.

Since the removal of the 9th Avenue North from the truck route in December 2020, Administration continues to receive service inquiries that express ongoing concerns with increased noise and vibration due to the traffic on 9th Avenue North. Additional concerns include the existing posted speed limit, concerns with road geometry, such as the lack of shoulders and the increased vehicular traffic of all types along the road.

The addition of 9th Avenue North into the Ring Road Safety Study will provide further analysis of these concerns with the overall safety review of the corridor.

Industry Impacts

Administration engaged with representation from the trucking industry to determine the impact to their operations since the truck route's removal from 9th Avenue North. It was advised that prior to the truck route removal, 9th Avenue North was primarily used by businesses located in northwest area or the Global Transportation Hub. Industry representatives indicated that operators have shifted to using alternative access points to the city by travelling northbound on the Bypass and entering the city using the interchanges at Pasqua Street North and Albert Street North.

While quantifiable data on business impacts were not provided to Administration, the general industry concerns pertaining to the 9th Avenue North and truck routes included the adverse impacts on travel times and the subsequent fuel costs associated with the longer alternative routing, increased costs for operations which leads to higher consumer prices, the lack of a west access point into the City's expressway network, and the long term risk for future demand for an east-west truck route on 9th Avenue North.

As more commercial activity is added to the City's west end, Administration anticipates that the use of 9th Avenue North will require re-evaluation to ensure that it aligns with the strategic goals of the TMP and OCP. Further, should industry provide Administration with quantifiable data on business impacts, we will include this information in future analysis. Administration will continue to engage with industry stakeholders surrounding any changes to traffic bylaws, trucking permits and traffic safety initiatives.

Environmental Analysis of Alternative Routes

To determine the environmental impact removing 9th Avenue North from the truck route, Administration completed analysis into alternative routes used by trucks. Through stakeholder engagement, Administration identified that prior to removing trucks from 9th Avenue North, it was primarily used as a route between the Global Transportation Hub and industrial/commercial areas in the city. The prime destination points for trucks entering from 9th Avenue North were:

- Rochdale Boulevard & Pasqua Street North
- Ross Industrial Area
- Victoria Avenue East & Prince of Wales Drive

Since the truck route removal in 2020, trucks from the Global Transportation Hub typically now use the Bypass and travel north along Highway 11 to reach these destinations.

Administration's environmental impact analysis was based on the comparison of greenhouse gas (GHG) emissions produced when using 9th Avenue North versus alternative routing via the Bypass. Table 1 displays the additional greenhouse gas emissions when the bypass is utilized as an alternative route to 9th Avenue North.

Table 1: Added Greenhouse Gas Emissions of Alternative Routes

Origin	Destination	Estimated GHG Emissions when using Bypass Alternative (Tonnes CO ₂ e per year)	Estimated GHG Emissions when using 9 th Ave N (Tonnes CO ₂ e per year)	Estimated Additional GHG Emissions per Year (Tonnes CO ₂ e per year)
GTH/Rotary Ave	Rochdale Blvd & Pasqua St	907	526	381
GTH/Rotary Ave	Ross Industrial Area	1134	789	345
GTH/Rotary Ave	Victoria Ave E & Prince of Wales Dr	1406	1105	301
Estimated Average GHG Emissions Increase (Tonnes CO₂e per year)				342

Prior to the removal of trucks on 9th Avenue North, there was an estimated average of 70 trucks per day using this road, which are now assumed to be using one of the alternative routes used in this analysis. The results shown in Table 1 was estimated with the assumption of 100 trucks being re-routed each day. As the city continues to grow and expand in the northwest and Global Transportation Hub areas, the estimated number of trucks using the alternative routes will begin to meet or exceed the 100 trucks per day and will have correlating increases in greenhouse gas emissions. Maps of each alternative route are included in Appendix B for reference.

Although it does not currently pose a significant barrier to the City’s sustainability goals, this increase in greenhouse gasses must be considered together with the other impacts of the road’s removal from the truck route, such as traffic flow or neighbourhood concerns when 9th Avenue North is evaluated in the future.

Future Considerations

While Administration supports 9th Avenue North’s inclusion as part of the City’s truck route network, the one-year review since its removal indicates that reinstatement as truck route is not imminently required.

Administration will continue to monitor the impacts of 9th Avenue North and will recommend changes to trucking routes as needed with consideration given to alignment with the goals of the City’s OCP, TMP, and environmental sustainability goals.

DECISION HISTORY

At the City Council meeting of October 28, 2020, a motion MN20-23 was brought forward and

carried as follows:

That Administration be directed to take all steps necessary to:

- Remove the trucking transportation route designation from 9th Avenue North between the points of Pinkie Road and Pasqua Street.
- Ensuring all applicable entities are concurrently updated, such as GPS databases.
- Cost-sharing of any necessary signage changes.
- Ensure Regina Police Service is aware and enforcing.
- Achieve implementation prior to December 31, 2020.
- That Administration return to City Council in one year with the implications of preventing heavy truck traffic on 9th Avenue North and the resulting impact on other areas of Regina.

Respectfully submitted,

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Chris Warren, Director, Roadways & Transportation

2/24/2022



Kim Ohra, Executive Director, Citizen Services

3/9/2022

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ATTACHMENTS

- Appendix A - Highway 1 Bypass Access Points
- Appendix B - Alternative Route Environmental Analysis
- Appendix C - Heavy or Long Combination Vehicle Route