

Corporate Report

REPORT NUMBER 200-2025-Infrastructure & Operations-Engineering

DATE

PREPARED

May 20, 2025

FILE

MEETING DATE June 2, 2025

SUBJECT Designated Truck Route By-law Information

RECOMMENDATION

For information only.

LINK TO STRATEGIC PLAN

This Report aligns with the Safety and well-being pillar identified in “Maamawe, Growing Together: City of Thunder Bay Strategic Plan 2023-2027.”

Safety and well-being: The implementation of the Designated Truck Route will reduce injury and fatal collisions in the transportation network.

EXECUTIVE SUMMARY

This report is provided for information.

The Designated Truck Route (DTR) is a long-standing file that has seen significant interest from local businesses and citizens as well as external stakeholders. This report is provided as an update prior to the By-law being re-presented at the June 23, 2025 City Council meeting for a decision.

A Designated Truck Route is being recommended as it results in a safer transportation network and addresses safety, noise and other concerns of heavy truck traffic on Dawson Road and Arthur Street. An engineering assessment was completed that reviewed the operational and safety impacts of implementing the proposed DTR. Intersections continue to operate at acceptable Levels of Service in both scenarios, although some isolated intersection turn movements may operate at lower Levels of Service. Predictive collision analysis determined that implementing the DTR would result in a decrease of fatal and injury collisions, which are the focus of Vision Zero/Roads Safe Systems Approach.

Amendments have been made to the DTR By-law presented in June 2019 to address concerns heard during consultation and deputations to Council.

DISCUSSION

History

On July 21, 2014 Council passed a resolution directing Administration to review removing heavy trucks from Arthur St west of the Expressway. This was due in large part to resident complaints concerning safety, engine compression use, speeding and excessive noise and vibrations of homes along Arthur Street from long trucks. Similar complaints have been received by members of Council and Administration from residents along Dawson Rd. These concerns were spurred by the fact the Province invested in the construction of the Highway 11/17 Shabaqua extension at the urging of Thunder Bay City Council, and truck traffic continues to use City streets that have increasing residential development and continue to be part of the City's plans for residential growth. Several options were explored to remove heavy trucks from Arthur Street and Dawson Road and move them to the TransCanada Highway, and the only feasible option is to implement a DTR.

The Hwy 11/17 extension was constructed on urging of previous Thunder Bay Councils as a means to remove heavy truck traffic from City streets. Through 2000 and 2001 the City of Thunder Bay passed two resolutions urging the Provincial Government to build the Highway 11/17 Shabaqua Extension. The Province completed the requested highway in 2007 and the City has not followed through with regulating traffic on our streets to move TransCanada traffic onto the new highway alignment.

Numerous memorandums and reports have been provided to Council with information on consultation, required signage, traffic information and impacts, enforcement and changes to the planned DTR to mitigate concerns.

In 2019, Council directed Administration to present a DTR By-law with the approval of Corporate Report R 130/2019. When the By-law was presented in June 2019, Council defeated it. Revisions to the DTR By-law were presented on June 22, 2020 which addressed many of the concerns brought forward during deputations, provided clarity on the intent of the By-law, and reduced negative impacts to local business deliveries. This By-law was also defeated. The Procedural By-law at the time did not acknowledge this as new direction from Council. Therefore Administration still has outstanding direction to bring forward a DTR By-law.

Designated Truck Route

A Designated Truck Route identifies corridors for truck traffic to use within the City. Trucks must remain on the DTR corridors, which are designed to handle heavier and

larger loads and are chosen to minimize impact on residents and alleviate unnecessary heavy truck traffic on the City's minor road network. Maps of the proposed DTR and weight restricted streets are shown in Attachments A and B.

The Designated Truck Route and bylaw wording were revised based on public and business feedback. Focus was placed on removing truck traffic from Dawson Road and Arthur Street West, and allowing truck traffic within the City core to remain largely as is. Revisions were also made to integrate the Designated Truck Route with the City's Dangerous Goods Route.

Weight restricted streets remain largely the same as the current Heavy Load By-law, with some deletions that are no longer appropriate, and the addition of Arthur Street West and Dawson Road to direct truck traffic entering the city from the west to the Designated Truck Route. Weight restrictions will be simplified and made more appropriate from having four weight limits to only two; 15,000 kg and 28,000 kg.

Heavy trucks will be able to travel to any delivery destination in the City. Trucks will be required to traverse as far as practical along the new Designated Truck Route during a trip. They are required to use the shortest possible distance on undesignated City streets to their end destination while still adhering to the weight restricted streets. Enforcement will be by Thunder Bay Police.

Traffic Impacts

An engineering assessment was completed in 2024 to reaffirm previous findings with new traffic data. If the DTR is implemented approximately 1,300 trucks from Dawson Road and about 300 trucks from Arthur Street would change their routes to the TransCanada Highway (Highway 11/17). The TransCanada highway is a limited access corridor designed to a higher engineering standard which accommodates heavy truck traffic. It is also maintained to a higher standard.

Travel Time

The DTR will impact TransCanada truck traffic that is not stopping in Thunder Bay, adding approximately 16 km to their route. For trucks currently travelling across Dawson Road and Highway 102, current travel time is 25 to 30 minutes one way. If trucks stay on the TransCanada Highway instead, which is about 16 km longer, travel time would increase by 5 to 15 minutes to a 30 to 45 minute drive. This is the same route that will be favoured once the Ministry of Transportation (MTO) completes the four laning and interchange improvements on the Thunder Bay Expressway. For trucks currently travelling across Arthur Street, currently the travel time is 30 to 35 minutes one way. If trucks stay on Highway 61 and the TransCanada highway instead, which is about 5 km longer, travel time is not expected to measurably change. This is due to the higher speed limits and less traffic along Highway 61 and Highway 11/17.

Road Safety

From a Vision Zero/Safe Systems Approach, our primary goal is to decrease the number of fatal and injury collisions that occur. Industry standard practices were used to predict the change in collisions. Rerouting heavy trucks to the TransCanada Highway is expected to improve the safety performance of both Dawson Road and Arthur Street. The resultant traffic volume on Highway 11/17, results in an increase in predicted minor/property damage collisions on that facility. Overall, the transportation network will experience a total reduction in serious fatal and injury collisions if the DTR is implemented.

GHG Emissions

A high level calculation was completed to determine the approximate increase in GHG emissions that would result from the longer route. Assuming that all the heavy trucks use diesel fuel and using the 2024 average fuel efficiency of a Canadian heavy diesel truck, there would be an approximate increase of 12.7 tCO₂e annually. This calculation does not account for load weights or impact of terrain on the two different route. It also does not include the scope three emissions mitigation that may accompany the DTR, such as reduced emissions from less regular road maintenance and renewal due to lower traffic volumes on City streets. For context, the City's last formal inventory total was 798,511 tCO₂e. Adding the DTR would therefore increase the total emissions by approximately 0.002%.

Consultation

There has been significant consultation on the DTR through Ward meetings, public and business information sessions, as well as direct communication with stakeholders. Feedback has resulted in changes to the final proposed DTR and the by-law wording. In addition to public and business consultation, Engineering also has consulted with the Ministry of Transportation, Ontario Provincial Police, Thunder Bay Police and Legal Services during the development of the proposed DTR to discuss impacts, concerns, and enforcement. During the process, Council and Administration also heard numerous deputations, both for and against implementing a DTR.

Mitigation of Concerns

Establishing a DTR will address concerns of residents along Dawson Road and Arthur Street of unsafe conditions, noise and vibration caused by heavy truck traffic. It results in a safer transportation network and it is responsible traffic engineering to move trucks to higher order facilities designed for larger vehicles and higher speeds. Reducing truck loading on Arthur Street and Dawson Road should also result in improved pavement performance and reduced lifecycle expenditures on these City streets.

Changes have been made to the DTR and By-law wording through four iterations which mitigate concerns heard during consultation.

- The DTR itself has been reduced from a network of designated arterials across the City to one main route that follows the Dangerous Goods Route. This was in

response to local businesses who had concerns of increased travel time and cost for having to adhere to the DTR network.

- Wording in the By-law allows local delivery trucks with multiple deliveries to not have to return to the DTR after each delivery. Local delivery companies can largely operate within the city as they have in the past.
- By-law wording allows gravel haulers and other trucking industry businesses west of the City to enter the City on Dawson Road without having to travel out to Sistonen's Corners to enter on the DTR.

Implementation

Based on the latest traffic assessment results and review of other impacts, Administration continues to recommend a DTR be implemented. The DTR By-law will be presented on June 23, 2025 for Council's consideration. If Council supports the By-law, the By-law will come into effect 90 days after. This allows time to complete an education campaign informing the trucking industry and public of the changes, to have the set fines approved and install required signage. Any required changes to the Heavy Load and Dangerous Goods by-laws will be brought to Council to make sure these by-laws which work together are reflective of each other. It would be expected the DTR would be enforceable by Fall of 2025.

FINANCIAL IMPLICATION

There are no direct financial implications associated with this report. The costs for the required signage are minor and are available within the existing capital budget.

CONCLUSION

Based on the latest traffic assessment results and review of other impacts, Administration continues to recommend a DTR be implemented. The DTR By-law will be presented on June 23, 2025. Authority to bring forward this by-law originates in R130/2018.

BACKGROUND

At the October 6, 2014 Committee of the Whole, a report was presented (Report No. 224/2014 – Engineering) regarding Arthur Street Weight Restrictions indicating a Designated Truck Route be considered.

At the December 7, 2015 Committee of the Whole, a report was presented (Report No. 144/2015 – Engineering & Operations) recommending the implementation of a Designated Truck Route through the City of Thunder Bay.

February 22, 2016 a memorandum sent to Members of Council regarding the Designated Truck Route. This memorandum outlined consultation on the DTR with residents at Current River and Neebing Ward meetings, CEDC, Thunder Bay Chamber of Commerce, local Heavy Truck Student Driver Training Centre, Municipality of Oliver Paipoonge, and Santorelli & Sons Ltd, a local business on Arthur Street.

March 7, 2016 a memorandum sent to City Council in response to correspondence received from the Canadian Federation of Independent Business regarding the Designated Truck Route and impacts to businesses within the Municipality of Oliver-Paipoonge along Arthur Street West. The memorandum indicated the types of businesses on Arthur Street West do not rely on passer-by traffic and travel time increases would be less than five minutes, and that pedestrian facilities do not exist within this corridor.

May 27, 2016 a memorandum sent to City Council regarding the Designated Truck Route By-law. The memorandum indicated that due to resource constraints in Engineering and Legal Services that the presentation of the by-law would be delayed.

March 22, 2017 a memorandum sent to City Council introducing the Designated Truck Route By-law. This memorandum outlined advanced warning signs for the DTR.

At the March 27, 2017 City Council meeting, By-law 1/2017 - A By-law to Designate Truck Routes through the City of Thunder Bay was presented. Also presented was a memorandum from Mr. R. Love, Traffic Technologist, dated March 22, 2017 and a memorandum from Councilor A. Foulds, dated March 27, 2017. At that time a resolution to amend the By-law was introduced; and a resolution was passed to refer the By-law and amending resolution back to Administration for further clarification on the wording of the by-law and report back to City Council following a review from Legal Services.

April 11, 2017 a memorandum sent to City Council regarding the Designated Truck Route By-law outlining changes to wording in the By-law to facilitate enforcement and clearly reflect the intent of the DTR.

At the April 24, 2017 City Council meeting, a memorandum was presented from Mr. R. Love, Traffic Technologist - Engineering Division, dated April 11, 2017 relative to By-law 36/2017 - A By-law to Designate Truck Routes through the City of Thunder Bay. At the April 24, 2017 City Council meeting, the City Clerk advised that the By-law and Amending Resolution regarding the Designated Truck Route By-law was withdrawn from the Agenda, and will be re-presented in June 2017 following further consultation by Administration with the trucking industry.

At the June 4, 2018 Committee of the Whole meeting, Report No. R 63/2018 (Infrastructure & Operations - Engineering & Operations) – Designated Truck Route was presented. Correspondence was also presented from communities and organizations.

At the June 4, 2018 Committee of the Whole meeting the Deputy City Clerk advised that Report No R 63/2018 (Infrastructure & Operations – Engineering & Operations) was withdrawn from the Agenda by Administration and will be presented at a future Committee of the Whole meeting.

At the March 4, 2019 City Council ratified Report 130/2018 (Engineering & Operations) recommending that a new Designated Truck Route By-law as outlined in the report be presented to City Council; and that a \$10,000 expansion to the Roads Sign Maintenance budget be included in future operating budgets for Council's consideration to cover costs of the annual billboard rental.

At the June 17, 2019 City Council meeting, DTR By-law 35/2019 was presented and defeated.

At the June 22, 2020 City Council meeting, DTR By-law 73/2020 was presented and defeated.

REFERENCE MATERIAL ATTACHED

Attachment A – Map of Heavy Load Restricted Streets and Designated Truck Route
Attachment B – Weight Restricted Street Schedules

REPORT PREPARED BY

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REPORT SIGNED AND VERIFIED BY

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Date (05/26/2025)