




CITY OF HAMILTON
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Transportation Planning and Parking Division

TO:	Chair and Members Truck Route Sub-Committee
COMMITTEE DATE:	September 13, 2022
SUBJECT/REPORT NO:	Truck Route Network Monitoring and Evaluation Framework (PED19073(d)) (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Omar Shams (905) 546-2424 Ext. 7474
SUBMITTED BY:	Brian Hollingworth Director, Transportation Planning and Parking Planning and Economic Development Department
SIGNATURE:	

RECOMMENDATION

- (a) That the framework and associated criteria for the evaluation of approved truck route network described in this Report PED19073(d) be received and approved;
- (b) That staff be directed to operationalize the truck route network evaluation framework including all required data collection, public and stakeholder engagement and analysis commencing in early 2023 and through 2023/2024 and report back to the Truck Route Sub-Committee by no later than Q4 2024;
- (c) That the estimated upset limit cost of \$20,000 associated with implementing and promoting a public opinion survey be funded from Project ID 4032155744 Transportation Master Plan (TMP) Modelling and Monitoring;
- (d) That the estimated upset limit cost of \$30,000 to conduct targeted data collection including truck volume and routing surveys, be funded from Project ID 4662115820 Traffic Count Program;
- (e) That Outstanding Business List Item ACP, respecting Public Works Report 22-005, Item 5 (PED19073(c)), staff to develop a framework and associated criteria that can be used to evaluate changes to the approved Truck Route Network in

order to inform future revisions to the truck route network and that the criteria be presented to the Truck Route Sub-Committee by Q3, 2022 with the results of the evaluation being completed no later than 2024, be identified as completed and removed from the Public Works Committee Outstanding Business List.

EXECUTIVE SUMMARY

On April 13, 2022, in its approval of the Hamilton Truck Route Master Plan (TRMP) Update, Council approved a new truck route network (TRN). The new network, referred to as the “Ring Road Concept with Positive Guidance” represents a significant change from the previous network. Specifically, the network promotes use of the LINC, RHVP, Highway 403, and QEW as the primary routes for moving goods within and through the City, while providing a secondary network for goods movement by small and medium trucks in the lower city, by defining a max four-axle network.

As part of the approval of the network, the Truck Route Sub-committee directed staff to develop a framework and associated criteria that can be used to evaluate changes to the approved TRN in order to inform future revisions to the Network, and present the criteria to the Truck Route Sub-Committee by Q3 2022 with the results of the evaluation being completed no later than 2024.

Taking into account the direction provided by the Truck Route Sub-committee, staff developed a framework and associated criteria to evaluate changes to the approved TRN and inform future revisions. These criteria were classified into three pillars that are consistent with the pillars of sustainability – Community Liveability, Environmental and Public Health and Economic Prosperity and generally correspond to the three broad goals of the City’s Transportation Master Plan (TMP) (A Sustainable and Balanced Transportation System; Healthy and Safe Communities, and Economic Prosperity and Growth).

This Report describes the criteria and associated framework, as well as, a general timeline for implementing the associated data collection efforts.

At the time of this Report, work to complete the signage and by-law changes to implement the TRN changes are underway. This work includes inventorying existing signage, preparing a detailed plan for sign fabrication and erection, and hiring a contractor to complete the work. Given the amount of work involved, it is expected that the approved TRN will be in place by Spring 2023.

Alternatives for Consideration – See Page 8

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: Costs for the implementation of public surveys and data collection to support the Truck Route Master Plan (TMP) monitoring and evaluation can be accommodated within existing approved project budgets. This includes Project ID 4032155744 TMP Modelling and Monitoring and Project ID 4662115820 Traffic Count Program.

Staffing: N/A

Legal: N/A

HISTORICAL BACKGROUND

On March 26, 2019, the Truck Route Sub-Committee convened and approved the Terms of Reference (TOR) for the TRMP Update.

On November 29, 2021, the Truck Route Sub-Committee considered PED19073(b) which presented a Draft Final Route Master Plan Update. The Sub-committee directed the staff to review the recommendations in Report PED19073(b) Truck Route Master Plan Update with prioritization given to the Terms of Reference ratified by Council, including an analysis that would permit a Ring Road approach for the Truck Route Master Plan Update and report back to the Truck Route Sub-Committee by March 31, 2022.

On March 28, 2022, staff brought forward a range of alternatives that could address concerns expressed by residents and respond to the concept of Ring Road approach. The Truck Route Sub-committee unanimously approved Alternative 5 – “Ring Road Concept with Positive Guidance” as the preferred option, which was subsequently ratified by City Council on April 13, 2022. The Truck Route Sub-committee directed the following:

- (a) That staff be directed to develop a framework and associated criteria that can be used to evaluate changes to the approved Truck Route Network in order to inform future revisions to the truck route network; and,
- (b) That the criteria be presented to the Truck Route Sub-Committee by Q3 2022 with the results of the evaluation being completed no later than 2024.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The review and update of the TRMP was conducted in accordance with the requirements of Phase 1 and 2 of the Municipal Class Environment Assessment (MCEA) process for master plans and the plan was unanimously approved by City Council. This network evaluation framework will assess the impact of changes to the approved TRN and present the results no later than 2024. Once approved, the framework and evaluation criteria will be used to inform future truck route changes and land use decisions. Overall the frameworks and associated criteria were developed in alignment with the TRMP vision and objectives, TMP Goals and Strategic Plan's priorities.

RELEVANT CONSULTATION

Public and stakeholder engagement was an integral part of the TRMP Update with over 30 stakeholder meetings, as well as, City-wide public consultation. The feedback from these consultations served to inform the development of the criteria and framework for the TRMP evaluation.

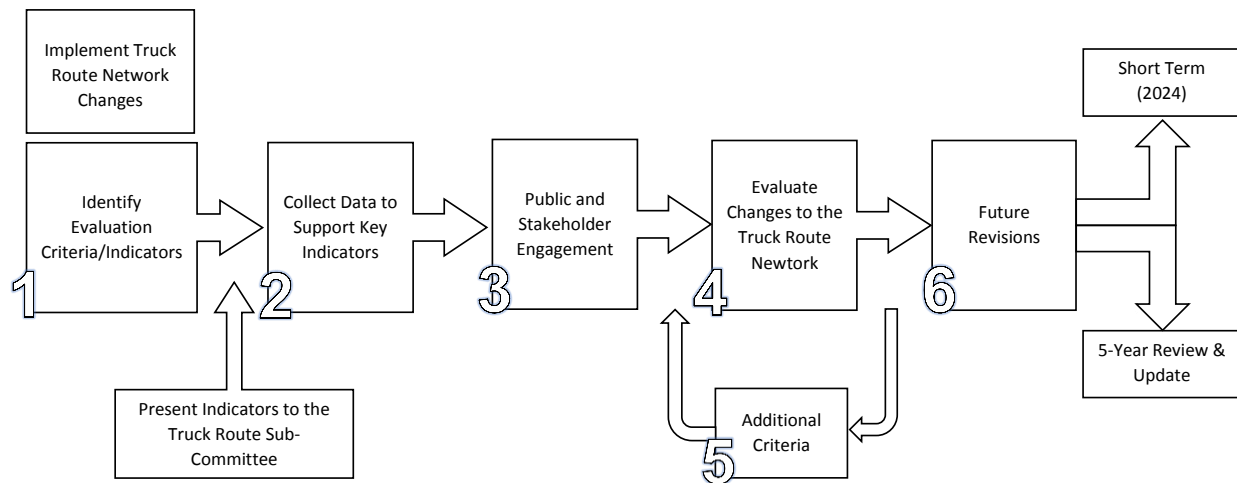
In addition, feedback from internal stakeholders was solicited for the development of evaluation framework and selection of criteria including Traffic Operations and Maintenance (TOM), and Public Health Services.

ANALYSIS AND RATIONALE FOR RECOMMENDATION(S)

The development of the evaluation framework and identification of associated criteria were informed by the TRMP's vision and objectives and data availability to measure the impacts of network changes. The objective of the TRN evaluation is to measure the effectiveness of the changes from a community liveability, environmental and public health, and economic prosperity perspective.

The TRN evaluation framework involves a stepwise process as illustrated on Figure 1. The evaluation framework includes both the collection of data, as well as, public and stakeholder input, and will serve to inform the evaluation of the Council approved TRN. It will also inform future updates that may be initiated through periodic reviews of the TRMP.

Figure 1: Truck Route Network Monitoring and Evaluation Framework



Evaluation Criteria and Key Indicators

The selection of evaluation criteria/indicators was informed by the vision, goals and guiding principles of the TRMP and the City's Strategic Plan priorities. While not a limitation per se, the availability of data, or the ability to collect data, also informed the selection of indicators. Each of the criteria and specific indicators are described below.

○ Community Liveability

This criteria is intended to measure how the revisions to the TRN support a safe multimodal transportation system that adheres to the Vision Zero policies and minimizes and distributes the impacts of the TRN away from areas that currently experience societal burden. This will be assessed by the following indicators:

- Number of collisions involving trucks:
 - by truck type/size/type of road users involved;
- Exposure of vulnerable road users (e.g. pedestrians and cyclists) to truck traffic along key routes. Where possible before and after comparisons will be made to;
- Change in Potential for Safety Improvement ranking of the truck route that was removed or modified through the TRMP Update; and,
- Truck volumes passing through neighbourhood development areas (formerly Neighbourhood Action Plan Areas). This includes 11 neighbourhoods

including Beasley, Crown Point, Davis Creek, Gibson/Landsdale, Jamesville, Keith, McQuesten, Riverdale, Rolston, Sherman and Stinson:

- Breakdown of type of complaints related to trucks including cut-through trips, noise and vibration, and speeding.
- The density of residents (vulnerable population) living on a truck route.

A secondary but critically important objective of this criteria will be to inform future land use planning decisions to ensure that new neighbourhoods are planned so as to avoid impacts of truck traffic on sensitive land uses and mitigate impacts on residents.

○ Environmental and Public Health

This criteria will serve to measure how the revisions to the TRN has succeeded in influencing environmental, climate change and public health outcomes. The proposed indicators are intended to measure the exposure level for sensitive land uses to truck traffic and include the following:

- Changes in measured air quality (CO, NO₂, CH₄, CO₂, PM 2.5, NO_x etc.);
- Changes in noise levels at select monitoring stations; and,
- Number of sensitive land uses within 50-meters of a truck route (i.e. Elementary schools, Hospitals, Secondary schools, Long-Term Care Facilities).

For the above indicators, staff will look to leverage data already being collected by different Divisions in the City as well as external partners such as McMaster.

○ Economic Prosperity

This criteria will include a variety of indicators to assess changes in economic prosperity including travel reliability, resiliency and connectivity among goods-generating land uses, access to employment centres, and observed or anecdotal impacts on local business activity. Given that there are many factors that influence economic prosperity and changes occur more gradually than some of the other criteria, it will be important to supplement the data with insights from specific businesses, Business Improvement Areas (BIAs), and staff from the Economic Development Division.

Proposed indicators include the following:

- Number of new development applications (residential/mixed-use commercial) on former truck routes;
- The volume of goods moved through the Port of Hamilton and Hamilton International Airport:
 - Commodity volume

- Truck volumes entering/exiting the port;
- Percent change in average truck trip length (measured using Geotab telemetric data); and,
- Change in truck trip times from key business parks/goods movement terminals (measured using telemetric Geotab data).

Public and Stakeholder Engagement Plan

Public and stakeholder engagement will be important to supplement and inform the evaluation of key indicators, and to gauge the successes and challenges experienced following revision of the TRN. Engagement efforts will also serve to inform and near-term network changes as well as future TRMP updates.

It is proposed that a city-wide public opinion survey be launched on Engage Hamilton to solicit public feedback on the evaluation criteria and the impact of TRN changes. The main focus of the survey will be to gather input on changes in quality of life and community liveability experienced by residents. In addition, interview sessions will be held with targeted stakeholder groups (Port of Hamilton and key tenants, BIAs, Truck Advisory Focus Group, Truck Route Reboot, et al.) to invite their feedback on the evaluation criteria and any changes on their business operations.

As part of the stakeholder engagement, it will be important to receive feedback and insights from Hamilton Police Services (HPS) on enforcement activities, violations issued and any changes in resourcing requirements.

Assessment Process

Using both the quantitative criteria and associated indicators, as well as, public and stakeholder input, staff will prepare an assessment of the changes to the TRN. This process will commence in Spring 2023 and continue throughout 2023 and 2024 with the goal of presenting the findings to the Truck Route Sub-Committee by no later than the end of 2024. It is expected that the assessment will be an iterative process and may include interim updates.

The assessment will include both specific route evaluation as well as network-wide analysis. The outcomes of the evaluation will determine the qualitative and quantitative impact of truck route changes on the community liveability, environmental and public health, and economic prosperity, and will establish a framework for future route change evaluation.

The established criteria/indicators will be utilized to evaluate the TRN changes in the short term and project how these will transfer to the long term. In the short term, the evaluation criteria will identify the need for any immediate revisions that could include

route change, regulation change, change to enforcement mechanism and the need for continuous monitoring of truck traffic on a route.

In the long term, the evaluation criteria will be utilized to update the network in the future taking into account land use changes, changes in functional road classification, emergency detour route changes, and major infrastructure projects such as the Light Rail Transit (LRT) project.

Truck Route Master Plan (TRMP) Implementation Status Update

Since the approval of the TRMP in April 2022, staff from Transportation Operations and Maintenance (TOM) have developed an implementation plan for the signage changes and by-law amendments. With an estimated 600-700 signs to be inventoried, removed, replaced or modified, this is an extensive undertaking. Assignment of staff to other safety related projects including the neighbourhood speed limit program and the Main Street conversion project has presented some resource challenges.

In recognition of the pressure to implement the changes a contractor is being retained to complete the signage inventory and signage installations. It is expected that the contractor will commence work in October, with signage changes occurring over the period from January to April 2023. A phased implementation plan has been identified such that changes in the highest impact areas will be implemented first.

ALTERNATIVES FOR CONSIDERATION

The Truck Sub-committee could choose to alter the staff recommendations or not approve the full or part of the evaluation framework and associated criteria. Typical changes would be to remove or add criteria to the evaluation framework. Revisions to the proposed framework and associated indicators would need to be feasible based on the availability of data. Addition of new criteria will require additional time and resources to investigate and evaluate the impacts of changes on the truck route network from a community liveability, environmental and public health, and economic prosperity perspectives.

ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN

Community Engagement and Participation

Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community

Economic Prosperity and Growth

Hamilton has a prosperous and diverse local economy where people have opportunities to grow and develop.

Healthy and Safe Communities

Hamilton is a safe and supportive City where people are active, healthy, and have a high quality of life.

Built Environment and Infrastructure

Hamilton is supported by state-of-the-art infrastructure, transportation options, buildings and public spaces that create a dynamic City.

APPENDICES AND SCHEDULES ATTACHED

N/A