

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

то:	Chair and Members Truck Route Sub-Committee
COMMITTEE DATE:	March 28, 2022
SUBJECT/REPORT NO:	Truck Route Master Plan Update (PED19073(c)) (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Omar Shams (905) 546-2424 Ext. 7474 Steve Molloy (905) 546-2424 Ext. 2975
SUBMITTED BY:	Brian Hollingworth Director, Transportation Planning and Parking Planning and Economic Development Department
SIGNATURE:	Bria Hollingworth

RECOMMENDATION

- (a) That "Alternative Five Ring Road Concept with Positive Guidance Concept" as shown in Appendix "A" attached to Report PED19073(c) be adopted as the Recommended Truck Route Network;
- (b) That the Draft October 29, 2021 City of Hamilton Truck Route Master Plan (TRMP) Update, attached as Appendix "A" to Report PED19073(b) from November 29, 2021, be amended to reflect the Ring Road Concept with Positive Guidance Concept Recommended Truck Route Network;
- (c) That the General Manager of the Planning and Economic Development Department be authorized to file the City of Hamilton Truck Route Master Plan (TRMP) Update as amended with the Municipal Clerk for a minimum thirty-day public review period to formally complete the Class Environmental Assessment (EA) process;
- (d) That the Transportation Operations and Maintenance (TOM) Division develop a truck route signing implementation strategy and that the estimated cost of \$350 K for signage modifications and installations be funded from the Unallocated Capital Levy Reserve Account #108020;

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- (e) That the Transportation Operations and Maintenance (TOM) Division prepare an amendment to the City of Hamilton Traffic By-law 01-215 for consideration by Council to incorporate the Recommendations within the Truck Route Master Plan (TRMP) Update;
- (f) That, where truck routes have been identified along various roads within the Recommended Truck Route Network (TRN) - Future Conditions, as presented in Appendix "A" attached to Report PED19073(b), that these roadways are planned and designed with the appropriate roadway and pavement structure to support truck movement and reflect a Complete-Livable-Better Streets and Vision Zero approach;
- (g) That Hamilton Police Services (HPS) be requested to review and develop an enhanced commercial vehicle enforcement strategy in collaboration with Transportation Planning (TP) and Transportation Operation and Maintenance (TOM);
- (h) That Item ACI, respecting Public Works Report 21-016, Item 6 (PED19073(b)), staff to review the recommendations in PED19073(b) 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, be identified as completed and removed from the Public Works Committee Outstanding Business List.

EXECUTIVE SUMMARY

The City of Hamilton Truck Route Master Plan (TRMP) Update was initiated following the approval of Report PED19073, on April 10, 2019, outlining a Terms of Reference (TOR) for the Update. The primary purpose of the TRMP review was to explore opportunities to balance the needs of residents and communities while advancing the safe and efficient movement of goods using trucks in Hamilton to support economic vibrancy and goods movement activities. The development of the TRMP has been an iterative process with significant input from the residents and key stakeholders.

In June 2021, a draft Truck Route Network (TRN) was selected and presented to the public and stakeholders as part of the second round of consultations. This draft TRN was based on a rationalization of truck routes across the City, elimination of some downtown and surrounding areas routes and introducing a time of day restriction for routes within the downtown and other areas with residential populations. Based on the feedback received during the second phase of public and stakeholder engagement, the final draft TRN and implementation strategies were further refined.

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On November 29, 2021 a revised TRN was presented to the Truck Route Sub-Committee. Some 32 delegations and 15 written correspondences were made to the Sub-Committee expressing comments and concerns with the proposed TRN. Residents expressed concerns that the proposed TRN did not go far enough in terms of eliminating truck traffic on routes that included sensitive uses such as schools, hospitals, child care facilities, and long-term care facilities. Conversely, representatives from the trucking industry and businesses reliant on goods movement by truck expressed concerns about the elimination of truck routes connecting the Bayfront Industrial Area with Highway 403 and the associated impacts on travel times, fuel consumption and economic viability of industries.

Accordingly, staff were directed to review the recommendations of the Study with prioritization given to the TOR ratified by Council, including an analysis that would permit a Ring Road approach for the TRN. The Ring Road approach generally seeks to direct truck traffic to the City's Parkways (Lincoln Alexander Parkway and Red Hill Valley Parkway) and the Provincial Highway system (QEW and Highway 403).

Taking into account the direction provided at the November 2021 Truck Route Sub-Committee Meeting, staff undertook to develop a range of alternatives that could address concerns expressed by residents and respond to the concept of a Ring Road approach. In addition to the alternative presented in November, five new alternatives were developed including the following:

- Alternative 2 Expanded Restriction Area;
- Alternative 3 A No Downtown Route Option;
- Alternative 4 A Ring Road Concept with Shortest Path Routing;
- Alternative 5 A Ring Road Concept with Positive Guidance; and,
- Alternative 6 A Ring Road Concept with Positive Guidance and one Outbound Route to Highway 403.

These options were presented to the Truck Advisory Focus Group and other stakeholder groups representing both residents and industry. Feedback on the alternatives was similar to that received in November 2021, with the exception that some resident and environmental advocacy representatives acknowledged the potential for the revised alternatives to reduce truck traffic through sensitive areas, thereby better reflecting the City's Strategic Plan Vision "To be the best place to raise a child and age successfully". Representatives from employers in the western Bayfront Area and Trucking Association re-iterated concerns about eliminating routing options between the Port and Highway 403 to connect to Southwestern Ontario. In particular, it was highlighted that agricultural goods are an important part of Hamilton's economy and increasing the cost of the movement of these goods have direct impacts on local businesses including the farming community and businesses that serve this community.

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In addition to public and stakeholder consultation, staff met with Hamilton Police Services (HPS) to identify enforcement impacts associated with each alternative. One of the key concerns with the Ring Road with Shortest Path alternative is the potential for more routes to become the shortest legal path to a destination. Essentially, as the area without truck routes (or other positive guidance) expands, it becomes difficult to enforce the pass through non-local delivery trucks. Streets that are not desirable for truck traffic may now become the shortest path, given the elimination of permissive routes.

Applying the City's Vision, "to be the best place to raise a child and age successfully", in the selection of a TRN, and in evaluating the positive and negative attributes (the "pros" and "cons") of each new alternative network, staff recommends that the Ring Road Concept with Positive Guidance be selected as the preferred Truck Route Network. This Network promotes use of the LINC, RHVP, Highway 403 and QEW as the primary routes for moving within and through the City, while providing a secondary network for movement by small and medium trucks in the lower city, by defining a max four-axle network.

It is recognized that the preferred alternative will increase travel distance for some truck trips. In order to off-set these impacts, a number of options will be considered, including:

- advocating for Provincial Highway improvements;
- monitoring truck traffic to ensure that the reduction in number of permissive routes does not result in trucks travelling on other viable routes;
- implementing neighbourhood traffic management measures; and,
- geometric changes to local and collector streets.

Alternatives for Consideration – See Page 16

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

- Financial: Implementation of the recommended changes to the Truck Route Network (TRN) will require new signage for routes that have changed, as well as, signage for new restrictions. The cost of making changes to the truck route signing system and printing of new truck route maps is estimated at \$350,000 and is proposed to be funded from the Unallocated Capital Levy Reserve Account #108020.
- Staffing: N/A
- Legal: An amendment to the City of Hamilton Traffic By-law, and relevant schedules, will be required based to implement the recommended Truck Route Network (TRN). A number of housekeeping and other changes

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reflecting the terminology and definition of heavy trucks as described in this Report are also required to make the wording of the By-law current.

HISTORICAL BACKGROUND

The City commissioned its first TRMP in 2007, to review and provide recommendations for an efficient truck route system. In 2010, Council approved the TRMP, which has since been used to manage the movement of trucks in Hamilton.

In 2016, as per Report PW16-001, the City adopted an alternative truck traffic management system referred to as "Hybrid" system to effectively integrate trucks in the City's transportation system and to minimize the impacts of truck traffic on the interests of the greater community. The decision to embrace the Hybrid system was a result of numerous concerns received by the members of Council, staff, and HPS regarding illegal trucking activities in primarily residential communities.

In July 2018, a motion was passed by Council respecting creation of a Hamilton General Hospital Safety Zone where staff was advised to report back to the Truck Route Sub-Committee on the feasibility of re-routing trucks away from Victoria Avenue North and Wellington Street North.

In August 2018, the Hamilton TMP was approved by Council. The 2018 TMP acknowledges the importance of a reliable goods movement Network and freight supportive land-uses as a key aspect of economic growth of the City. Action 65 of the TMP recommended a review and update of the 2010 TRMP Study, following which staff commenced steps to initiate a TOR for the Update.

In March 26, 2019, the Truck Route Sub-Committee convened and approved the TOR for the TRMP Update. IBI Group, in association with GLPi and David Kriger Consultant, was retained though a competitive Roster process to carry out the technical analysis and consultation required for this Study. At the November 1, 2019 Truck Route Sub-Committee Meeting, the Consultant presented the Study Work Plan (Work Plan) and the Consultation Plan for review and input. The Work Plan and Consultation Plan were unanimously approved, and staff was directed to proceed with the Project.

On November 1, 2021, Public Works Committee considered a Citizen Committee Report from the Cycling Committee regarding a Truck Route Proposal Motion (Item 9.3) and TRMP Input (Item 11.2). The recommendations of this Committee Report were directed to the Truck Route Sub-Committee for consideration in the TRMP.

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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 following:

- (a) That the Truck Route Master Plan Update (PED19073(b)) (City Wide), be received, and;
- (b) That staff be directed 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.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

The TRMP Review and Update was conducted in accordance with the requirements of Phases 1 and 2 of the MCEA process (Municipal Engineers Association, October 2000, as amended in 2007, 2011, and 2015), for Master Plans. There are no Schedule B or C projects developed from this Master Plan, and as such, there is no opportunity for the public or industry partners to request a Part II Order, or "bump up" request, to the Minister.

Consistent with the *Highway Traffic Act*, the City's Traffic By-law requires a vehicle weighing more than 4,500 kg to follow the designated truck route system. Vehicles are permitted to deviate from the truck route system when making a local delivery and, to do so, they must take the shortest path from the truck route system to the point of pickup or delivery and then return immediately via the shortest route to the truck route system. It should be noted that as changes are made in the truck route system, additional truck travel distance is required. Additional truck travel equates to higher levels of greenhouse gasses (GHG) emissions and increased potential for motor vehicle collisions, which are contrary to the goals of the City's Strategic Plan, climate change, and Vision Zero Action Plans. Overall, the Study recommendations are consistent with the *Places to Grow Act* (Section 3.2.4), TMP, and other related policy documents.

RELEVANT CONSULTATION

Public and stakeholder engagement was an integral part of the TRMP Update. Extensive public engagement activities were undertaken across Hamilton throughout the Study. The engagement approach that was applied went above and beyond the requirements of the EA process for master plans.

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A summary of consultation activities and input received is documented and contained within the November 29, 2021 Report PED19073(b). Key activities throughout the Study included:

- Project Website;
- On-line Mapping Tool;
- Surveys;
- Virtual Public Information Centres (PIC);
- Speaking Engagements;
- Technical Advisory Committee;
- Truck Advisory Focus Group;
- Truck Route Sub-Committee; and
- Digital Communications.

Below is a table summarizing engagement activities completed, including those undertaken subsequent to the November 29, 2021 Truck Route Sub-Committee meeting.

Date	Outreach
May 6, 2019	Sherman Community Meeting
November 1, 2019	Truck Route Sub-Committee
January 8, 2020	Ministry of Transportation and Adjacent Municipalities
February 13, 2020	Technical Advisory Committee
March 10, 2020	Truck Advisory Focus Group
March 17, 2020	Business Community and Chambers of Commerce
July 14, 2020	Goods Movement Community
September 2, 2020	Virtual Public Information Centre # 1
October 7, 2020	Hamilton Cycling Committee
October 20, 2020	Technical Advisory Committee
November 24, 2020	Agriculture and Rural Affairs Advisory Committee
March 1, 2021	Technical Advisory Committee
April 28, 2021	Technical Advisory Committee
May 13, 2021	Community Awareness Emergency Response Group (CAER)
May 31, 2021	Truck Advisory Focus Group
June 9, 2021	Ministry of Transportation and Adjacent Municipalities
June 11, 2021	Business Community and Chambers of Commerce
June 16, 2021	Goods Movement Community
June 24, 2021	Virtual Public Information Centre # 2
July 7, 2021	Glanbrook Community Meeting
September 16, 2021	Environment Hamilton
October 14, 2021	Flamborough Community Council
November 29, 2021	Truck Route Sub-Committee

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Date	Outreach
February 2, 2022	Meeting with Hamilton-Oshawa Port Authority (HOPA)
February 9, 2022	Meeting with Environment Hamilton
February 28, 2022	Truck Advisory Focus Group Meeting
March 10, 2022	Agri-business Industry Representatives
March 14, 2022	Hamilton Industrial Environmental Association

Following the presentation of the TRMP Report in November 2021 and based on the direction received, key stakeholders were re-engaged. A targeted approach was adopted given that most of the issues raised at the November meeting pertained to the lower city.

In addition to a formal Truck Advisory Focus Group Meeting held on February 28, 2022 meetings were also held with the Hamilton-Oshawa Port Authority (HOPA), Environment Hamilton, Agri-business Industry Representatives, and the Hamilton Industrial Environmental Association. The following is a summary of input received:

Industry Comments

- The routes be identified and maintained as full-time accessible truck routes to provide at least one connection between the Industrial Bayfront and Highway 403 including:
 - Wellington Street between Burlington Street and Cannon Street;
 - Victoria Avenue between Main Street and Burlington Street;
 - Cannon Street between Victoria Avenue and York Boulevard; and,
 - Main Street from the 403 to Victoria Avenue;
- At least one of the alternatives presented to the Truck Route Sub-committee at its March 28, 2022 meeting include a western connection to and from the regional transportation network;
- Freight transportation costs have increased in some segments of the marketplace, these costs being incurred by businesses will undoubtedly be passed on to the consumers;
- The driver shortage, the pandemic, and rise in fuel price has also led to significant supply chain issues;
- Axle limitations would require more trucks to move the same amount of freight. This would not only increase traffic and congestion in certain areas but the potential for increased interactions with cyclists and pedestrians; and,
- Any Ring Road option that does not include a connection to Highway 403 would increase operational and supply chain costs further which will be passed to end users.

Community Comments

- Positive guidance should be provided to minimize ambiguity for local delivery truck drivers and limit the possibility of human errors;
- Lack of truck routes in the urban areas can conceivably increase the risk of exposing more sensitive receptors to truck traffic;
- Restriction by vehicle size can improve air quality in densely populated communities;
- Minimize conflict between vulnerable road users and local delivery trucks, where conventional bike lanes are located on truck routes; and,
- A vastly permissive truck route system does not achieve the objective of this Study and the City's Strategic Vision.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The development of the TRMP has been an iterative process with significant input from the residents and key stakeholders.

On November 29, 2021 a revised TRN was presented to the Truck Route Sub-Committee. Some 32 delegations and 15 written correspondences were made to the Sub-Committee expressing comments and concerns with the proposed Network. Residents expressed concerns in that the proposed TRN did not go far enough in terms of eliminating truck traffic on routes that included sensitive uses such as schools, hospitals, child care facilities, and long-term care facilities. Conversely, representatives from the trucking industry and businesses reliant on goods movement by truck expressed concerns about the elimination of truck routes connecting the Bayfront Industrial Area with Highway 403 and the associated impacts on travel times, fuel consumption, and economic viability of industries.

Accordingly, staff were directed to review the recommendations of the Study with prioritization given to the TOR ratified by Council, including an analysis that would permit a Ring Road approach for the Network. The Ring Road approach generally seeks to direct truck traffic to the City's Parkways (Lincoln Alexander Parkway, and Red Hill Valley Parkway) and the provincial Highway system (QEW and Highway 403).

Taking into account, the direction provided at the November 2021 Truck Route Sub-Committee Meeting, staff undertook to develop a range of alternatives that could address concerns expressed by residents and respond to the concept of a Ring Road approach. In addition to the alternative presented in November, five new alternatives were developed including the following:

- Alternative 2 Expanded Restriction Area;
- Alternative 3 A No Downtown Route Option;

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- Alternative 4 A Ring Road Concept with Shortest Path Routing;
- Alternative 5 A Ring Road Concept with Positive Guidance; and,
- Alternative 6 A Ring Road Concept with Positive Guidance and a Westbound Route to Highway 403.

The key features of these alternatives are described below:

Alternative 1 – A permissive truck route network with maximum five-axle restrictions on select routes in the City's central area, as presented on November 2021.

Alternative 2 – Expands the five-axle restrictions to additional routes in the lower city, including Wellington Street and Victoria Avenue North, south of Ferrie Street; Sherman Avenue, Ottawa Street and Parkdale Avenue North, south of Barton Street; and Main Street/Queenston Road and King Street between Red Hill Valley Parkway and Dundurn Street. Moreover, Barton Street East between Sherman Avenue and Ottawa Street and Gage Avenue between Barton Street and Beach Road is removed from the network.

Alternative 3 – Builds on the Alternative Two network but changes the inner-city routes restriction to a maximum of four axles. In addition, it removes east-west routes from the Downtown Secondary Plan Area, between Wellington Street and Bay Street.

Alternative 4 – Removes permissive truck routes from the inner-city network except for those that provide direct access to industrial land uses and key truck generator hubs/terminals. Heavily relies on local and provincial expressways for use by freight vehicles.

Alternative 5 - Builds on the Alternative Two network but changes the inner-city routes restriction to a maximum of four-axles.

Alternative 6 – Builds on the Alternative Five network while providing one full-time outbound route between the Industrial Bayfront Area and Highway 403 via Wellington Street and Cannon/York Boulevard.

Analysis of Sensitive Land Uses

As per the TOR for the TRMP review, the City's Strategic Plan Vision Statement, Transportation Master Plan, and Vision Zero Action Plan guided the objectives and principles of the TRMP. The City's Strategic Plan Vision is "To be the best place to raise a child and age successfully". It means "having an inclusive community, actively engaged in making Hamilton a better place for everyone. It is creating an accessible environment, supporting residents through all of life's stages, and one that encourages positive development of children as they grow towards becoming healthy adults and seniors."

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Many indicators were used to evaluate progress towards achieving the City's Vision. In the context of the TRMP, the prevailing sentiment is that reducing the impacts of truck traffic on neighbourhoods, specifically children and other vulnerable populations is the primary goal. Safety is an equally important consideration.

The impact of truck traffic on sensitive receptors was considered in the development and weighed in the evaluation of alternative networks. An inventory of all licensed/registered sensitive land uses in the City of Hamilton that were used for this Study area as follows:

- Elementary Schools 135;
- Secondary Schools 25;
- Post-Secondary Schools 6;
- Hospitals 9;
- Long-term/Senior Care Facilities 119; and,
- Child Care Facilities 235.

Notably, a large number of child care facilities share space with the elementary and secondary schools. The objective of this Study was to minimize the impact of truck traffic on the sensitive receptor to provide liveable, child and family-friendly communities for Hamiltonians.

Axle Restrictions

The key changes recommended for this Study are introduction of downtown restrictions by truck size (i.e. measured by axles) and removal of road segments from the truck route system. The proposed Network presented in November, 2021 recommended a maximum five-axle restriction for a number of routes, especially in the lower city. The primary rationale for this restriction was that it would eliminate the largest trucks, such as double trailer trucks and a large majority of truck-trailer combinations. Feedback received in November, 2021 Truck Route Sub-committee meeting from residents was that this would still allow many types of large trucks.

By applying the City's Strategic Vision and Vision Zero lens and given the negative impact of heavy vehicles on the interests of residential communities, two of the new alternatives presented in this Report PED19073(c)) consider four-axle restrictions for most inner-city routes. The four-axle restriction provides accessibility and positive guidance for local delivery trucks while minimizing the unavoidable impact of heavy trucks on sensitive receptors, low income and vulnerable residential communities. This restriction would preclude non-local delivery trucks from traversing the downtown and residential communities while encouraging the use of smaller vehicles for local delivery purposes. However, it may require more trucks to deliver the same amount of goods which has cost implications for both shippers and receivers.

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Appendix "B" attached to Report PED19073(c) provides examples of different truck types that fall under the different axle categories.

Analysis of Alternatives

The following table presents the Pros and Cons of each of the alternatives developed following the November 2021 Truck Route Sub-Committee.

Alternatives	Pros	Cons
	Precludes large and heavy (more than five-axles) non-local delivery trucks from passing through downtown and surrounding communities	Requires increased enforcement resources and tools
	Shifts unavoidable impacts (noise, vibration and air emissions) of large and heavy trucks away from sensitive receptors and residential neighbourhoods	Shifts the impact of truck traffic to communities adjacent to RHVP, LINC and Burlington Street
Alternative 2	Potential for road user safety improvement as it matches local delivery vehicle class with road typology while supporting local economic growth and development activities	Increases travel time and operational cost for agriculture/farming products moving operators with a destination to Port and Bayfront areas, currently traversing through downtown
	Provides network connectivity, truck accessibility and positive guidance for local delivery trucks	 The number of sensitive receptors that remain on truck routes: Elementary Schools – 18 Secondary Schools – 7 Hospitals – 4 Long-term/Senior Care Facilities – 9 Child Care Facilities - 48
Alternative 3	Removes east-west routes from the Downtown Secondary Plan Area and restricts large and heavy passthrough vehicles (five-axles and more) from downtown and surrounding communities	Prohibits multi-point delivery to local business (e.g. No Frills, Hospitals, Tim Hortons) that can cause increased supply chain issues and operational cost

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Alternatives	Pros	Cons
	Reduces unavoidable impacts (noise, vibration and carcinogenic pollutant) of large and heavy trucks on sensitive receptors, low income and vulnerable neighbourhoods Encourages use of small and medium trucks for local deliveries	Does not provide network connectivity and positive guidance for local delivery trucks in downtown Increases the impact of truck traffic on communities adjacent to RHVP, the LINC and Burlington
	Potential for improved liveability, walkability and vibrancy in the downtown and surrounding neighbourhoods	Street Conceivably exposes six additional elementary schools to truck traffic
		Requires increased enforcement resources and tools The number of sensitive receptors remaining on truck routes: Elementary Schools – 18 Secondary Schools – 7 Hospitals – 3 Long-term/Senior Care Facilities – 9 Child Care Facilities - 48
	Restricts trucks from downtown, lower city and mountain communities	Provides local delivery truck drivers full autonomy of route choice, increases ambiguity and driver errors
Alternative 4	Provides truck accessibility to and from key truck generators and industrial land uses to the local and provincial expressways via at least one full-time truck route Potential for improved walkability and vibrancy in the downtown and	Conceivably exposes all elementary schools, hospitals and other sensitive receptors in most of the lower city and mountain to truck traffic Requires increased enforcement resources and tools
	surrounding neighbourhoods	Unequitable truck route distribution across the City and increases safety concerns due to lack of positive guidance

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Alternatives	Pros	Cons
		 The number of sensitive receptors remaining on truck routes: Elementary Schools – 13 Secondary Schools – 6 Hospitals – 1 Long-term/Senior Care Facilities – 5 Child Care Facilities - 37
	Precludes large and heavy passthrough vehicles (five-axle and above) from downtown and surrounding communities	Increases travel time and operational cost for trucks with five-axles and over with a destination to Port and Bayfront that are currently passing through the downtown
Alternative 5	Reduces unavoidable impacts (noise, vibration and carcinogenic pollutant) of large and heavy trucks on sensitive receptors, low income, and vulnerable neighbourhoods Provides network connectivity and positive guidance to local delivery trucks and encourages use of small and medium trucks for local deliveries	Requires increased enforcement resources and tools (difficult to distinguish local delivery and pass through trucks with five- axles) Increases the impact of truck traffic on communities adjacent to RHVP, LINC and Burlington Street
	Potential for improved air quality and all road user safety	 The number of sensitive receptors remaining on truck routes: Elementary Schools – 18 Secondary Schools – 7 Hospitals – 4 Long-term/Senior Care Facilities – 9 Child Care Facilities - 48
Alternative 6	Precludes eastbound large and heavy vehicles (five-axle and more) traversing downtown, currently using Main Street, while accommodating for one full-time westbound connection from Bayfront to Highway 403 through	Increases travel time and operational cost for inbound agribusiness trucks with five- axles and over, with a destination to Port, that are using Main Street and Victoria Avenue

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Alternatives	Pros	Cons
	Wellington, Cannon and York Boulevard	
	Reduces unavoidable impacts (noise, vibration and carcinogenic pollutant) of heavy trucks on sensitive receptors, some low income and vulnerable neighbourhoods	Requires increased enforcement resources and tools (difficult to distinguish local delivery and pass through trucks with five- axles)
	Provides network connectivity, redundancy and positive guidance to local delivery trucks and encourages use of small and medium trucks for local deliveries	Increases the impact of heavy truck traffic on communities adjacent to RHVP, the LINC and Burlington Street
	Marginally supports local agriculture businesses by reducing travel time for outbound trips to Southwestern Ontario destinations	 The number of sensitive receptors remaining on truck routes: Elementary Schools – 18 Secondary Schools – 7 Hospitals – 4 Long-term/Senior Care Facilities – 9 Child Care Facilities - 48

Mitigation Measures

A less dense truck route network with fewer permissive truck routes provides a greater need to augment those routes to optimize safety for all road users and allow for efficient movement of goods. A range of geometric and operational improvements could be implemented to improve all road user safety and self-enforce the Recommended TRN. Examples of improvements are not limited to the following:

- Geometric Improvements:
 - Separated cycling infrastructure where along truck routes (e.g. Cannon Street); and,
 - Well-designed mid-blocks and intersections along truck routes to primarily protect vulnerable road users.
- Operational Improvements:
 - Way-finding tools such as Ontario 511 app to 'push' information to drivers in-cab;
 - Restriction of trucks to inner lanes on multi-lane arterials to increase distance

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between trucks and sidewalks;

- Potential speed limit reduction along some inner-city truck routes to improve safety combined with the use of automated speed enforcement measures;
- Continues improvements to address operational issues along key truck routes (Burlington Street, RHVP and the LINC) to increase travel reliability along those corridors to make them attractive for use by large and heavy trucks; and,
- Collaborate with Ministry of Transportation Ontario (MTO) and Ministry of Environment Conservation and Parks (MECP) to enforce the emission tampering and use of engine breaks at problem areas in Hamilton.

In addition, there are a number of planned provincial highway improvements that will help to address some of the routes affected by the adoption of a Ring Road concept with positive guidance. This includes the Highway 5/6 Interchange, Highway 6 North Morriston By-pass, Highway 403 and Highway 6 Interchange Improvements, and other Highway 403 widenings. The City can continue to advocate for the prioritization of the construction of these improvements.

ALTERNATIVES FOR CONSIDERATION

The Truck Route Sub-Committee could choose to alter the staff recommendations. Most typical changes would be to remove road sections from the truck route system. One impact of added deletion would be to increase the demand of enforcement and/or to increase the difficulty of enforcement. Past experience has shown that, despite the best efforts of staff and the Police to try to understand the implications of truck route changes, because so many individual trucking companies and businesses are involved, unpredictable problems often occur when the system is revised. Revisions to the proposed TRN will require additional time and money to investigate and evaluate the impacts of changes on the overall TRN from a safety, enforcement, connectivity, and public and environmental health 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.

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Healthy and Safe Communities

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

Clean and Green

Hamilton is environmentally sustainable with a healthy balance of natural and urban spaces.

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

Appendix "A" to Report PED19073(c) - Alternative Truck Route Network Concepts Appendix "B" to Report PED19073(c) - Illustrations of Truck Types by Size and Axles

OS:SM:cr