



HAMILTON TRUCK ROUTE MASTER PLAN REVIEW AND UPDATE

March 28, 2022

- Study Recap: Overall Scope and Objectives
- Truck Route Sub-committee Recommendations (November 29, 2021)
- Additional Engagement Activities
- Alternative Network Solutions
- Implementation Strategies
- Recommendations

Study Recap



Truck Route Master Plan (TRMP) Review Objectives

The objectives of the TRMP Review are to:

- Review Hamilton's **existing truck route network**;
- Identify the **current and projected truck route-related problems**;
- Develop, evaluate, and **recommend practical solutions**; and
- Recommend supporting policies and tools that the City can consider to **mitigate the current problems and manage the potential future challenges**.

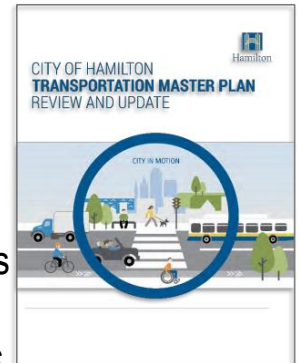
City of Hamilton Transportation Master Plan (2018)

The plan provides a comprehensive and attainable transportation blueprint for Hamilton as a whole that balances all modes of transportation to become a healthier city. The success of the plan is based on specific, measurable, achievable, relevant and programmed results and actions.

The TMP identifies three desired outcomes for the future transportation system:

1. A Sustainable and Balanced Transportation System;
2. Healthy and Safe Communities; and,
3. Economic Prosperity and Growth.

The TRMP Review is a direct action of the Transportation Master Plan, and will support the desired outcomes.

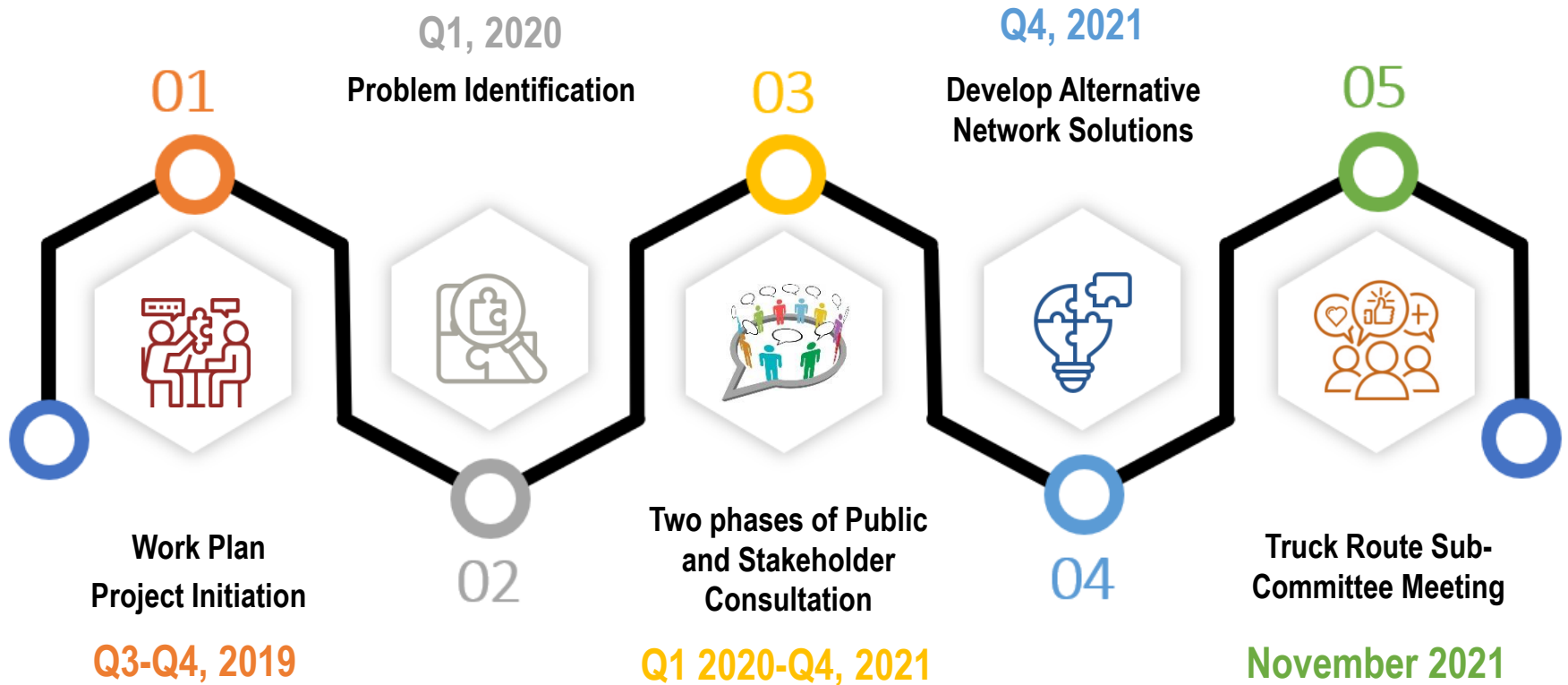


Vision/Opportunity statement:

A truck route network that supports Hamilton and regional *economic prosperity*, coexisting with a *high quality of life for communities* as well as *environmental and public health*.



Study Process



Truck Route Sub-Committee Recommendations

Truck Route Master Plan Update (PED19073(b)) (City Wide)

- 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.

Highlights from Terms of Reference

Modifications Approved at March 26 2019 Truck Route Sub-Committee Meeting

- That the Terms of Reference for the Truck Route Master Plan review be revised to include reference to the City of Hamilton's **vision statement** and the goal of **Vision Zero**;
- That the City's vision statement – to be the best place to raise a child and age successfully – and the goal of Vision Zero be set out at the start of the terms of reference; and,
- That the City's vision statement and Vision Zero action plan guide the objectives and principles of the Truck Route Master Plan;

The City's Strategic Vision

The City of Hamilton Strategic Plan: 2016 to 2025

According to the Plan, the Vision 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.”

City of Hamilton's Vision

***To be the best
place to raise a
child and age
successfully***

Inventory of City-wide Sensitive Land Uses

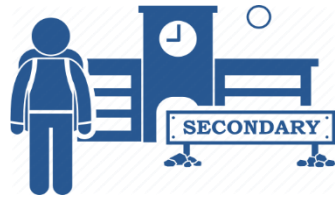
135



9



25



119



6



235



Additional Stakeholder Consultation

Consultation Activities following November 2021 Sub-Committee Meeting

- Hamilton Oshawa Port Authority (HOPA) – February 2, 2022
- Environment Hamilton – February 7, 2022
- Truck Advisory Focus Group – February 28, 2022
- Agri-business Industry Representatives – March 10, 2022
- Hamilton Industrial Environmental Association – March 14, 2022

Alternative Truck Route Network Options

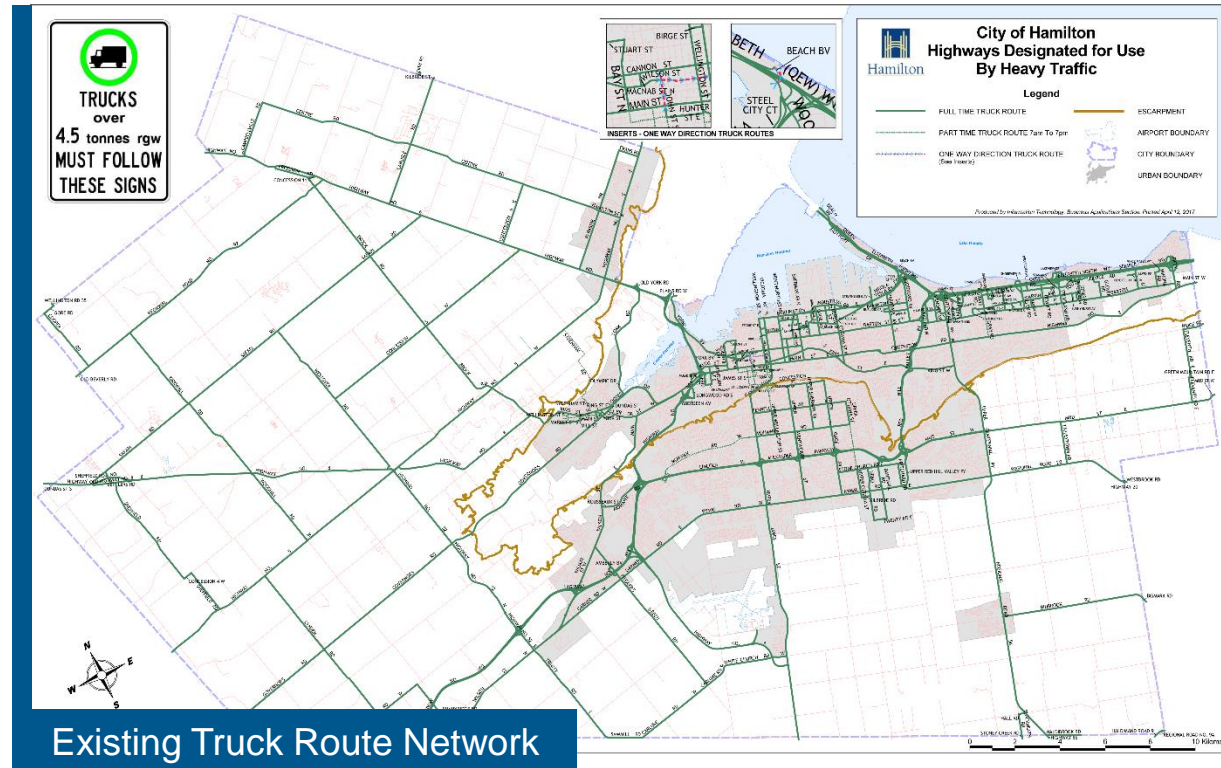


Current Truck Route Network

The Truck Route Network defines the roadways that trucks are allowed to use in Hamilton.

Any vehicle or trailer which weighs more than 4,500 kg required to use the truck route network.

Trucks are permitted to travel on roads that are not part of the designated truck route network when making a local delivery. They are required to take the most direct path to/from the truck route network to the destination.



Types of Trucks

According to the City of Hamilton Traffic By-Law, a “truck” (“heavy traffic”) means and includes:

... any vehicle or trailer for which the permit fee under the Highway Traffic Act is based upon a weight of vehicle and load in excess of 4500 kilograms, excepting however buses, fire fighting equipment, public utility vehicles and authorized emergency vehicles

- Traffic By-Law 01-215, Section 56 (m)

All of the vehicles shown to the right are considered “trucks” and must use the truck route network, except when taking the shortest path from the network to make a local delivery.

HEAVY - Tractor Trailer Combinations (typically 5 or more axles)



MEDIUM - Single-Unit Trucks (typically 3-4 axles)



LIGHT - Light Single-Unit Trucks (2 axles, 6 tires)



Network Alternatives

Alternative 1

Draft Recommended
Truck Route Network

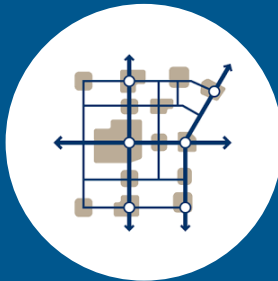
Draft
Recommended
Network
(November 29)

Key Features

Maximum 5-Axle restriction for select routes in downtown and parts of the mountain.

Alternative 2

Expanded Restriction Area (5-Axle)

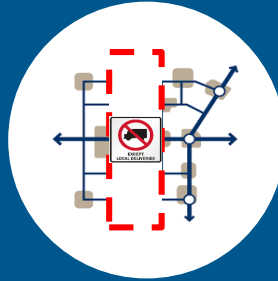


Key Features

Expand maximum 5-Axle restriction area easterly in the lower city

Alternative 3

A No Downtown Route Option



Key Features

Maximum 4-Axle restriction on most routes in the central area of the city.
No east-west routes through the downtown, between Wellington Street and Bay Street

Alternative 4

A Ring Road Concept with Shortest Path Routing

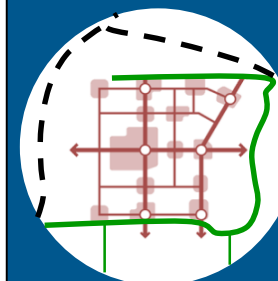


Key Features

Expressway focused
No prescriptive truck routes in the central area of the city to provide positive guidance for local delivery truck

Alternative 5

A Ring Road Concept with Positive Guidance



Key Features

Prioritize expressways for heavy trucks and augment them with 4-axle restricted routes in the central area to provide positive guidance for local delivery trucks

Alternative 6

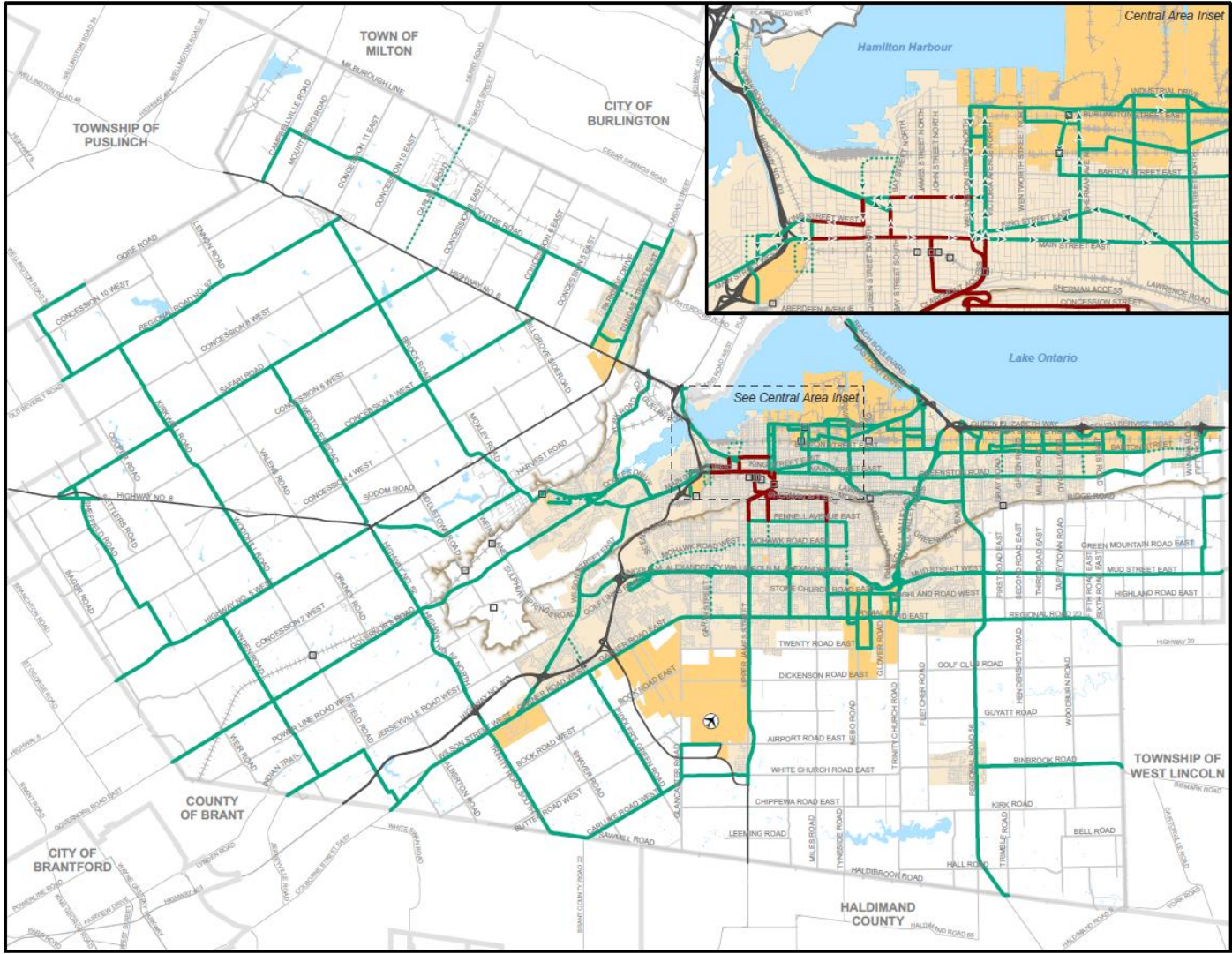
Ring Road Concept with Positive Guidance and one Outbound Route to Highway 403



Key Features

Prioritize expressways for heavy trucks and augment them with 4-axle restricted routes in the central area
Provide one outbound route to Highway 403 via Wellington, Cannon and York Boulevard

Alternative 1: Recommended Truck Route Network (as of November 2021)



HAMILTON TRUCK ROUTE MASTER PLAN



Recommended Truck Route Network



Truck Routes

- Full-Time (Provincial Highway)
- Full-Time
- Daytime Only (7am - 7pm)
- Max 5 Axles
- Low Clearance Bridge
- Employment / Business Area

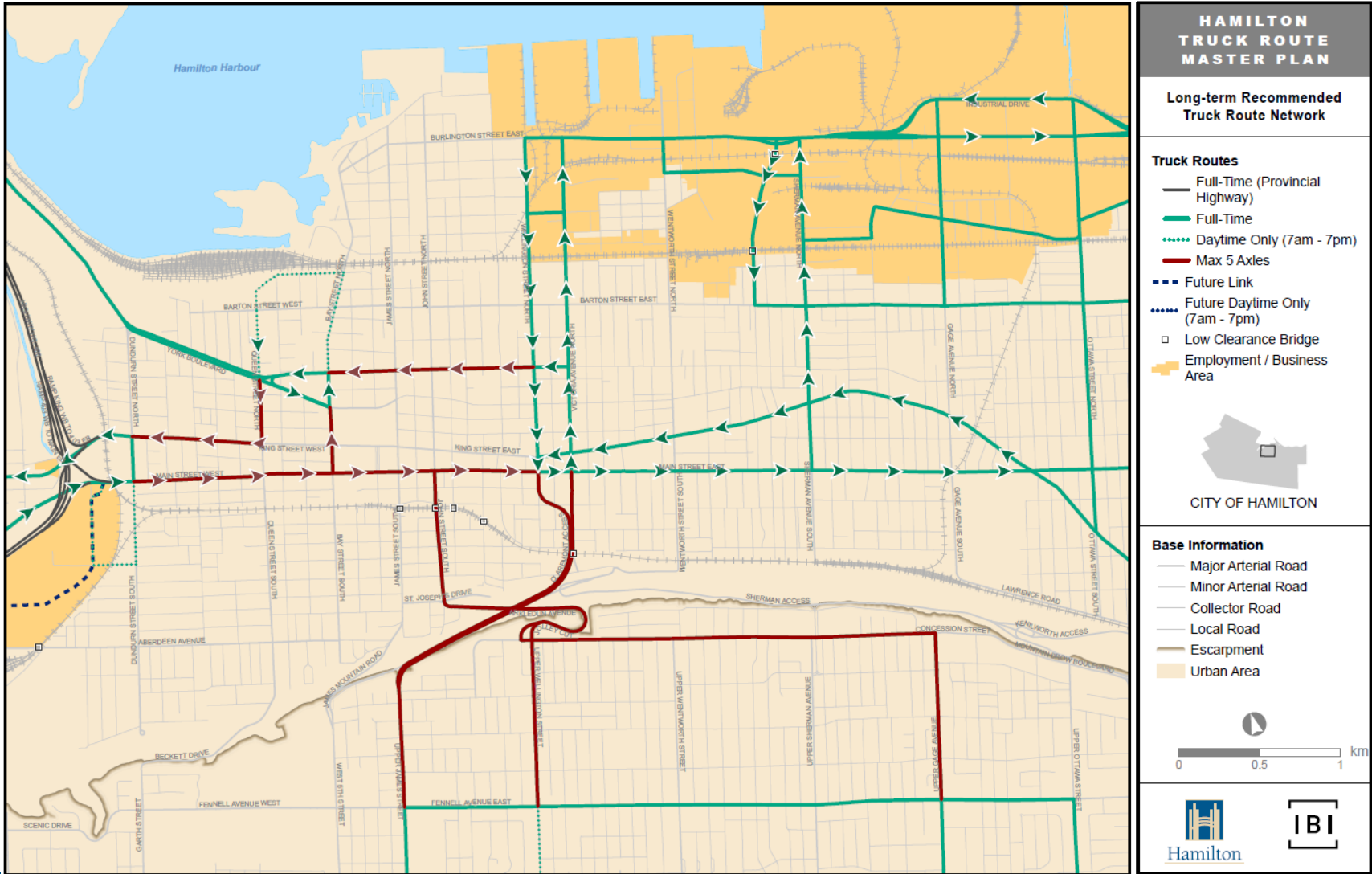
Base Information

- Major Arterial Road
- Minor Arterial Road
- Collector Road
- Local Road
- Escarpment
- Urban Area

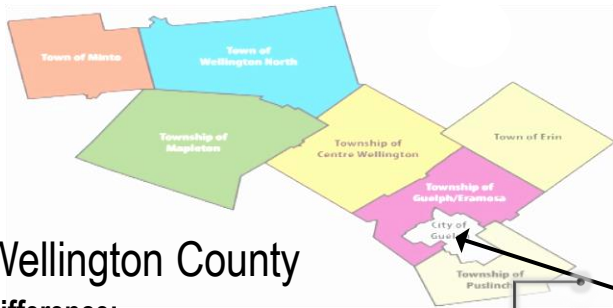



Alternative 1: Central Area Inset



Restrictions Impact Assessment (Mid-day Traffic Condition)

Sample travel times which vary by day and season



Wellington County

Difference:
Travel Time – 7-9 min
Travel Distance – 14.7 km



Greater Toronto Area

Difference:
Travel Time – (-4) min
Travel Distance – 0.8 km



Southwestern Regions

Difference:
Travel Time – 8-10 min
Travel Distance – 17 km



Niagara Region

Difference:
Travel Time – 0 min
Travel Distance – 0 km

Maximum 5-Axle Segments: Sample Allowable Trucks

Dump truck 4-axle



Cement Mixer 4-axle



Film Studio tractor trailer 5-axle



Refuse truck: 3-axle



Delivery Van 2-axle



Many tractor-trailers (van style) 5-axle



Vehicle carrier with trailer 5-axle

Maximum 5-Axle Segments: Sample Prohibited Trucks



Dump truck with trailer 6-axle



Tractor with two dump trailers 7-axle



Tractor with soft-sided van 7-axle



Tractor with dump trailer 7-axle

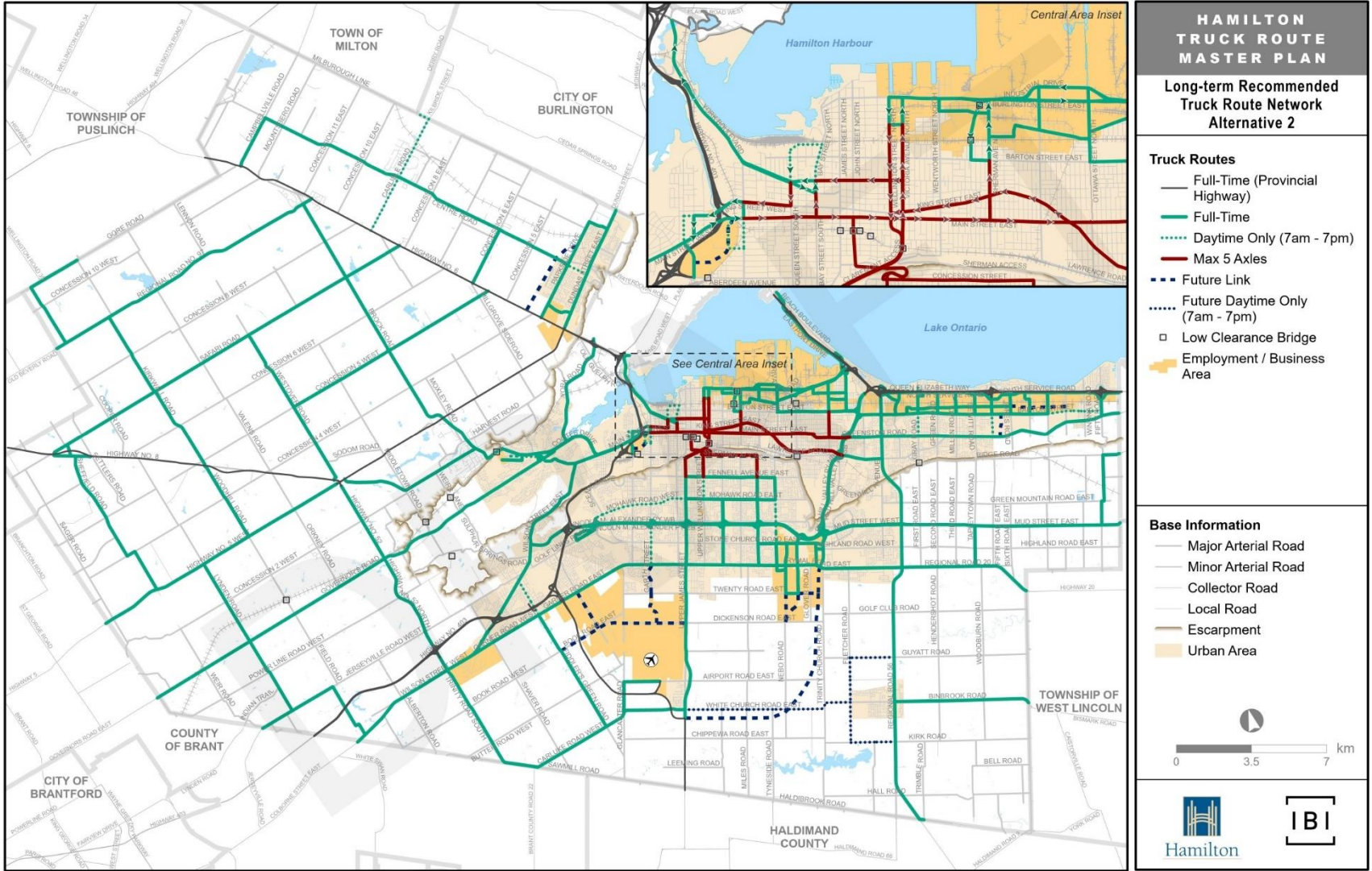


Tractor with two tanker trailers 8-axle

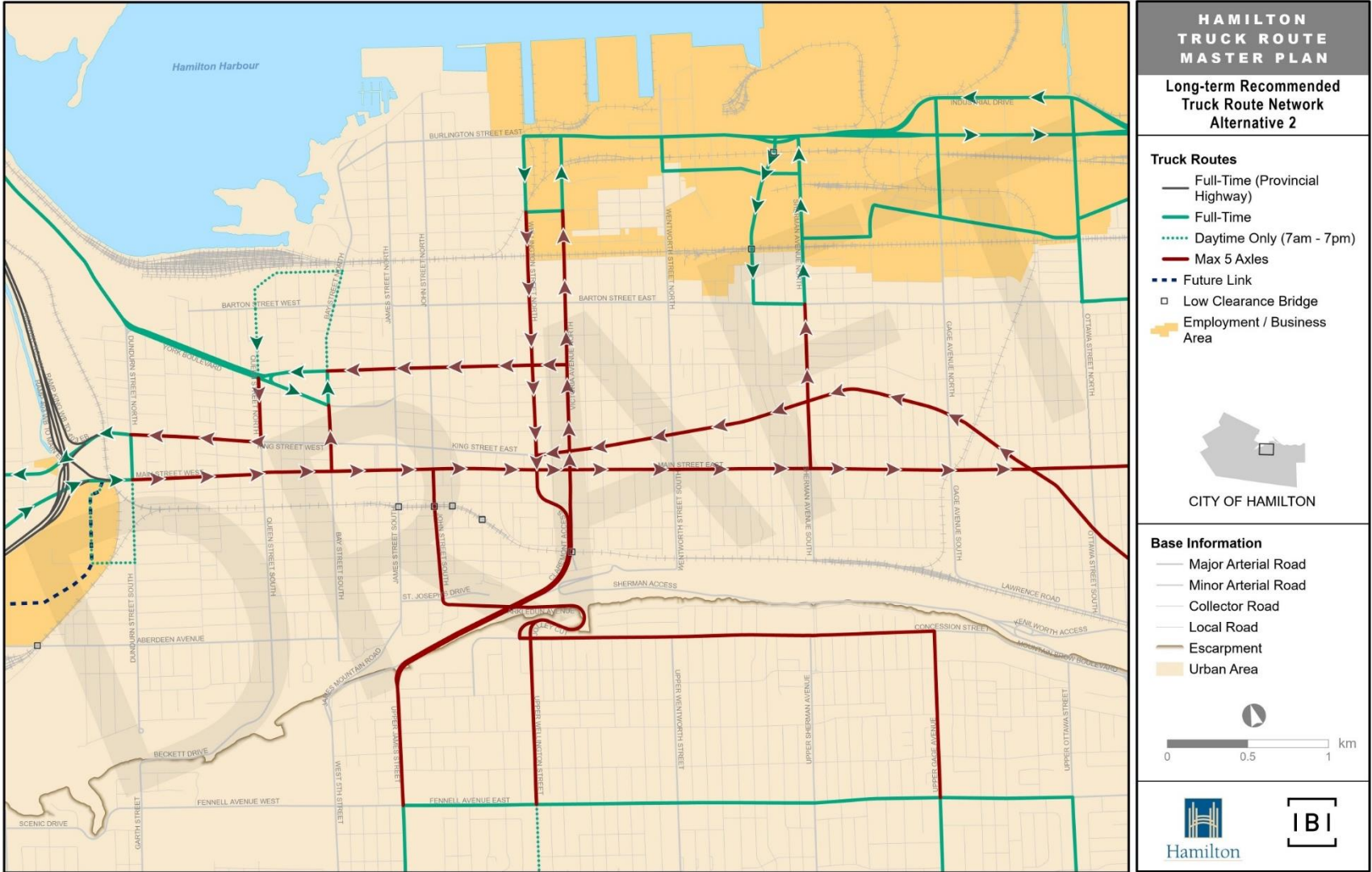


Tractor with tanker trailer 6-axle

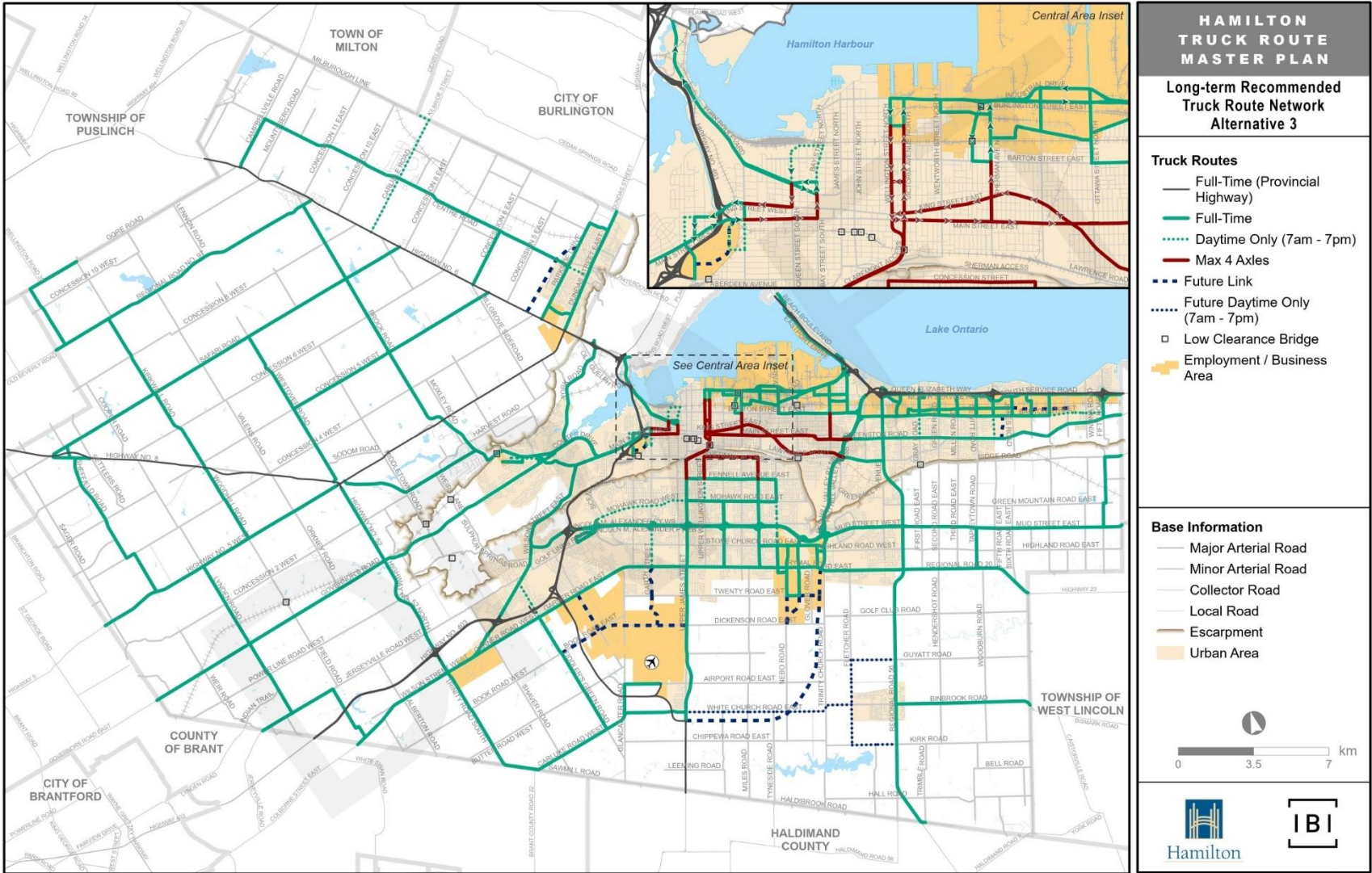
Alternative 2: Expanded Restriction Area



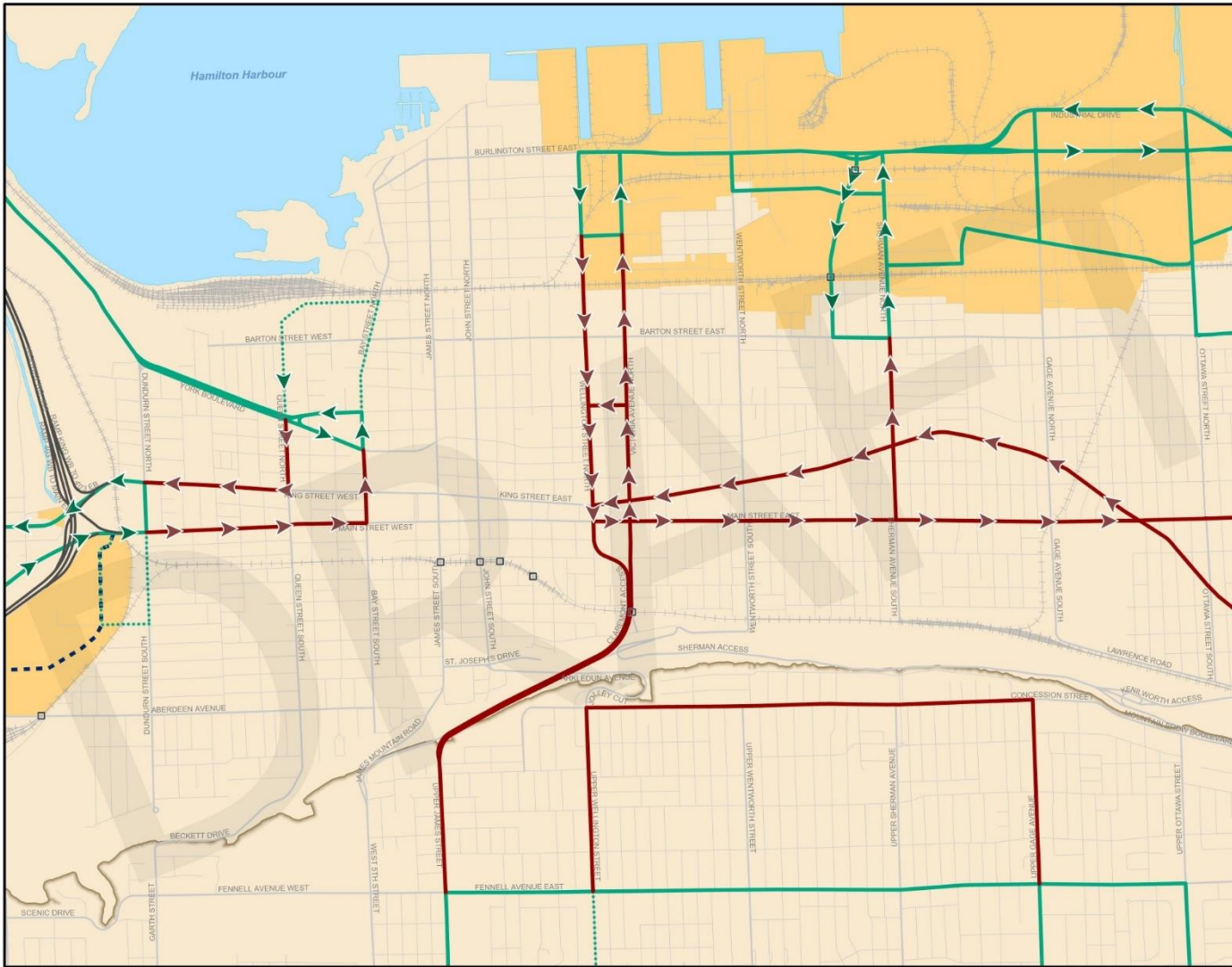
Alternative 2: Central Area Inset



Alternative 3: No Downtown Route Option



Alternative 3: Central Area Inset



HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network Alternative 3

Truck Routes

- Full-Time (Provincial Highway)
- Full-Time
- Daytime Only (7am - 7pm)
- Max 4 Axles
- - - Future Link
- Low Clearance Bridge
- Employment / Business Area

Base Information

- Major Arterial Road
- Minor Arterial Road
- Collector Road
- Local Road
- Escarpment
- Urban Area

CITY OF HAMILTON

0 0.5 1 km

Maximum 4-Axle Segments: Sample Allowable Trucks

Dump truck 4-axle



Utility Truck 3-axle



Cement Mixer 4-axle



Landscaping truck with Trailer 4-axle

Postal Service Delivery Van 2-axle



Refuse truck: 3-axle

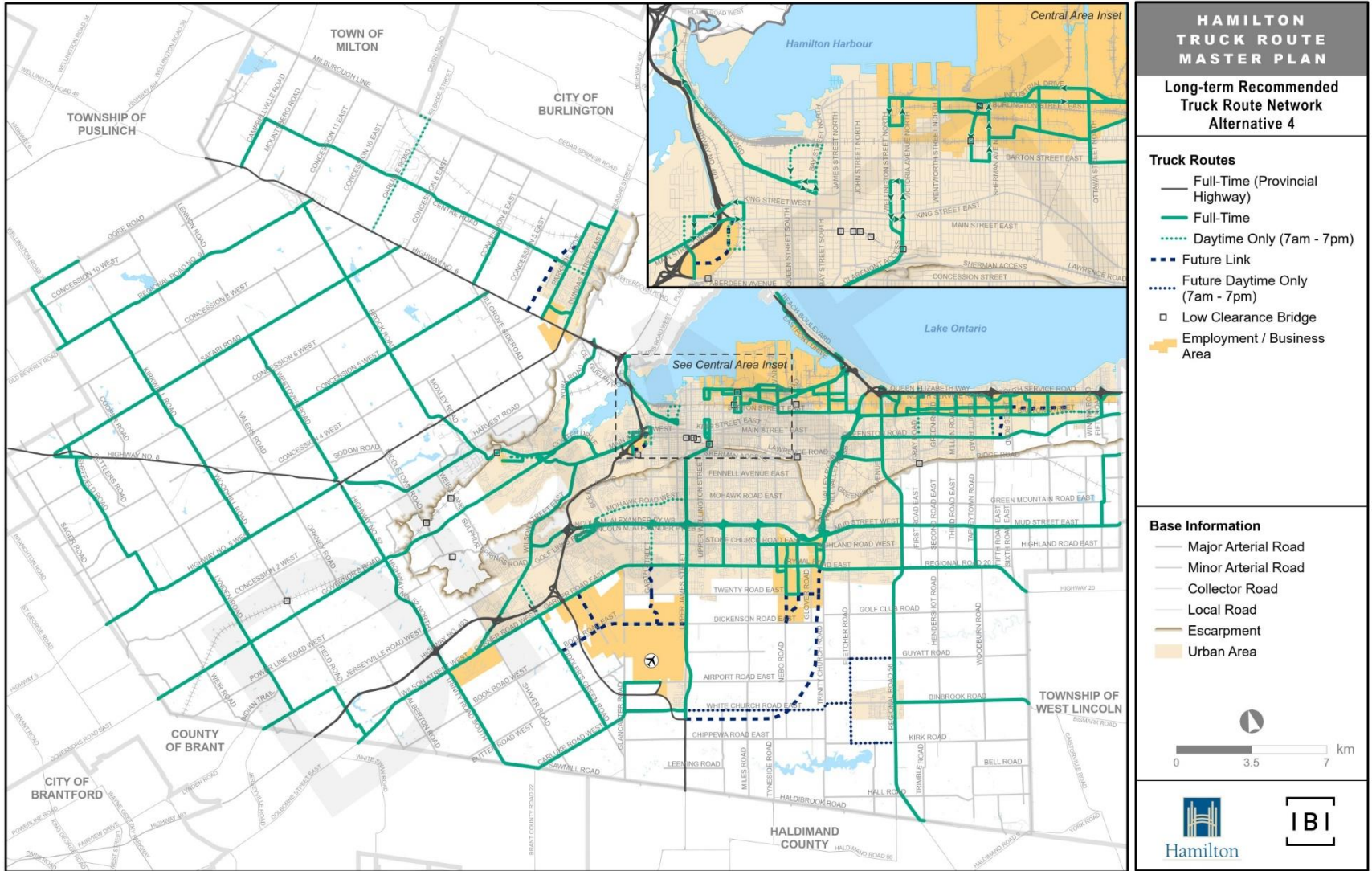


Delivery Van 2-axle

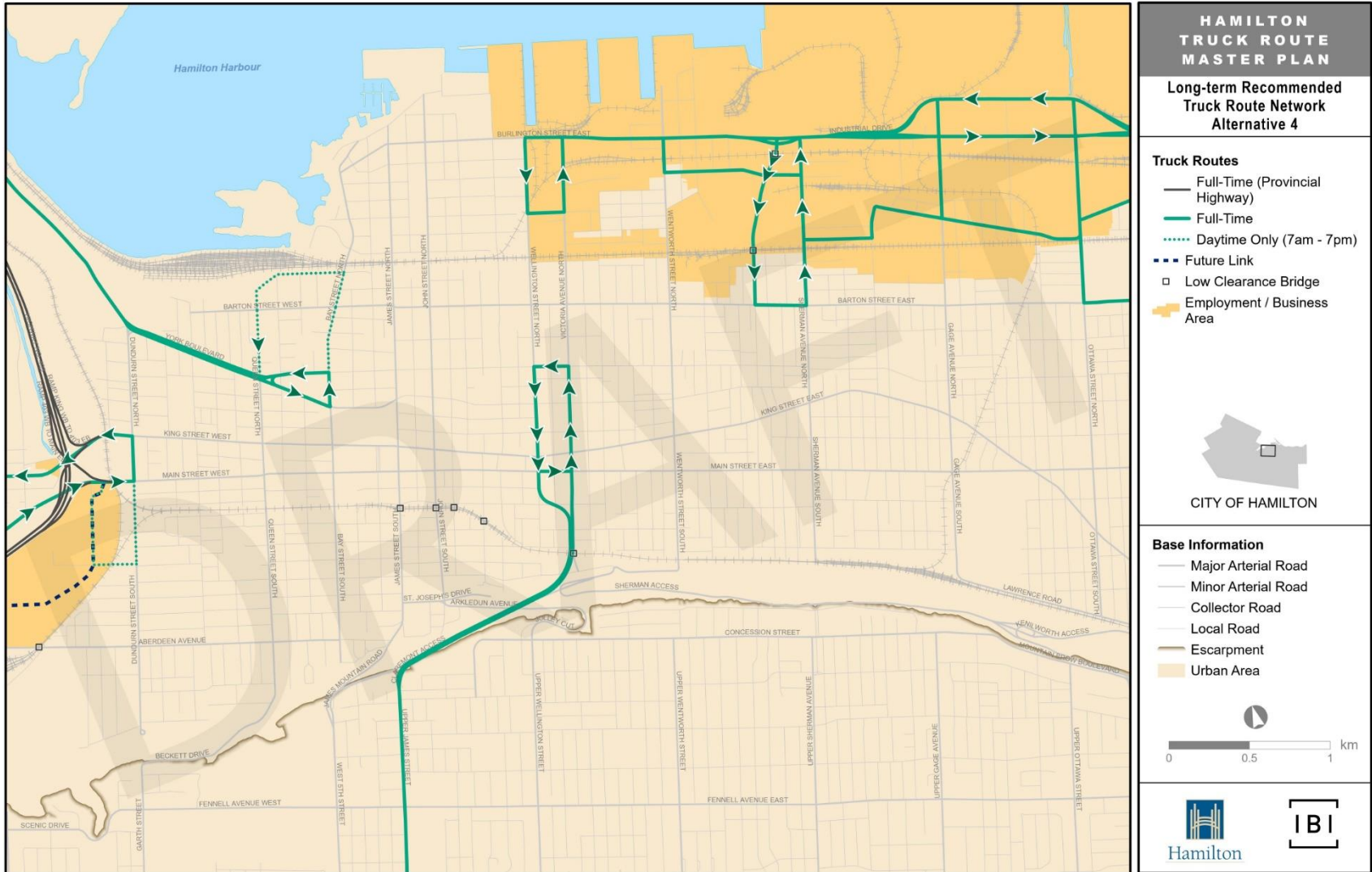
Maximum 4-Axle Segments: Sample Prohibited Trucks



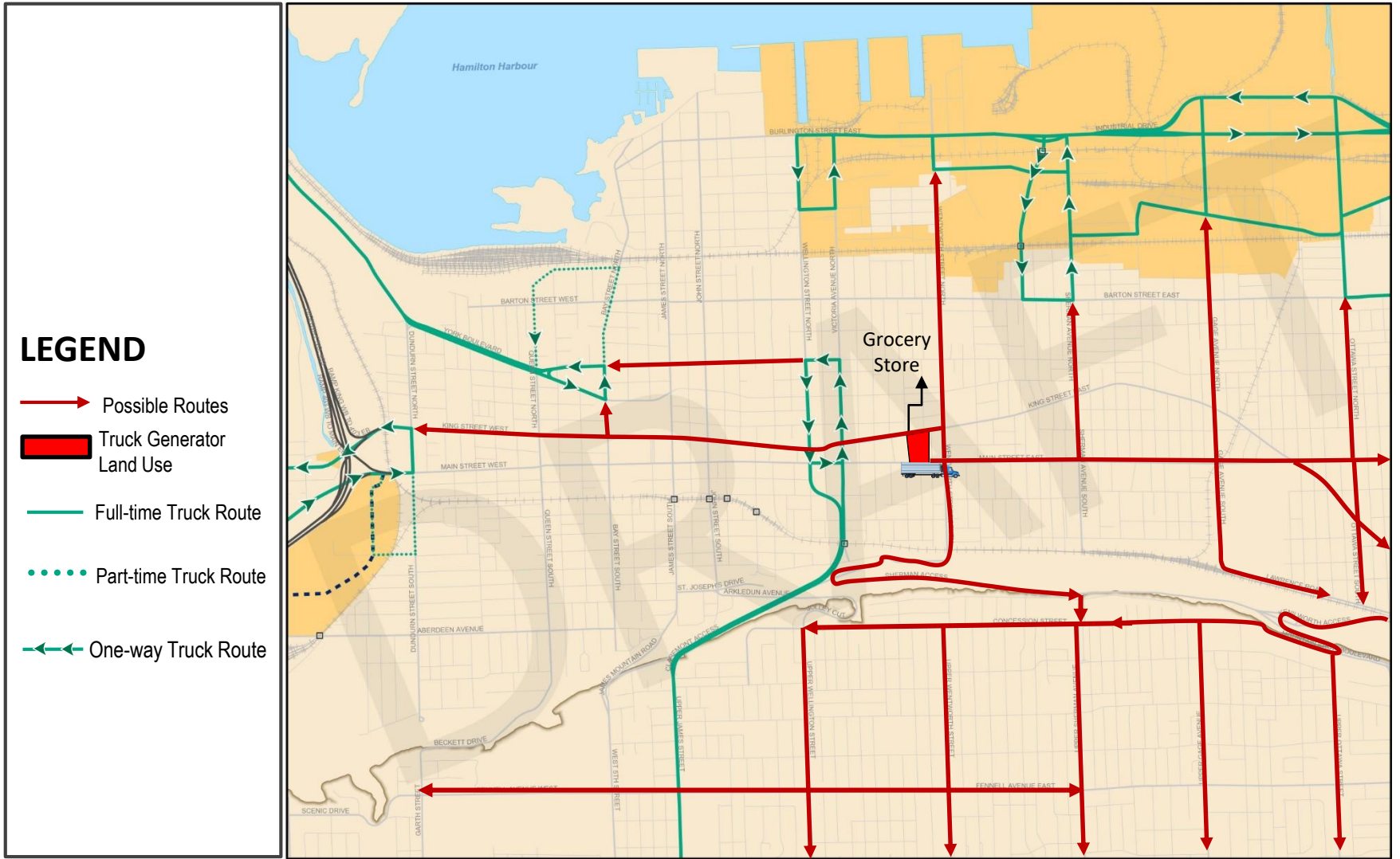
Alternative 4: A Ring Road Concept with Shortest Path Routing



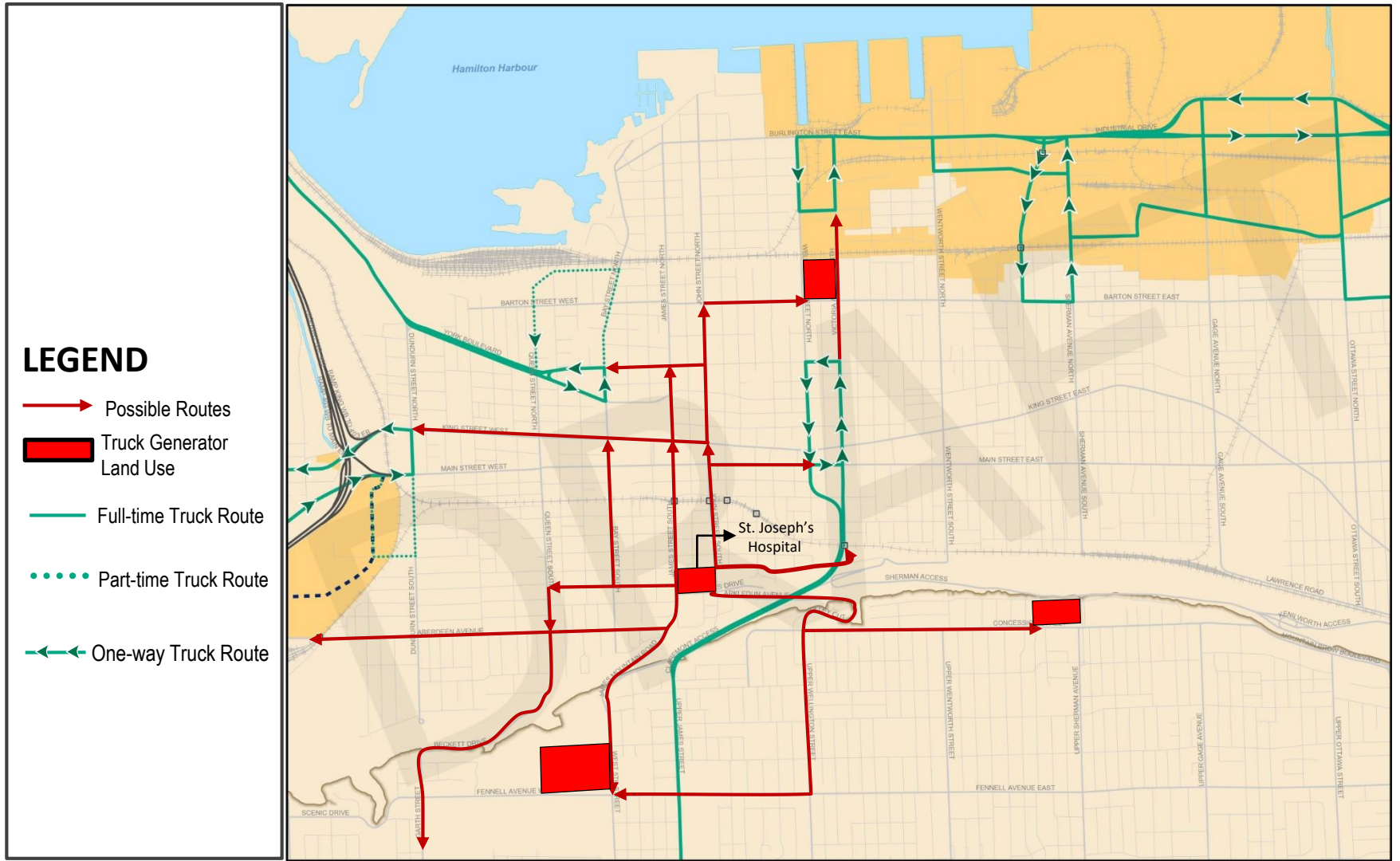
Alternative 4: Central Area Inset



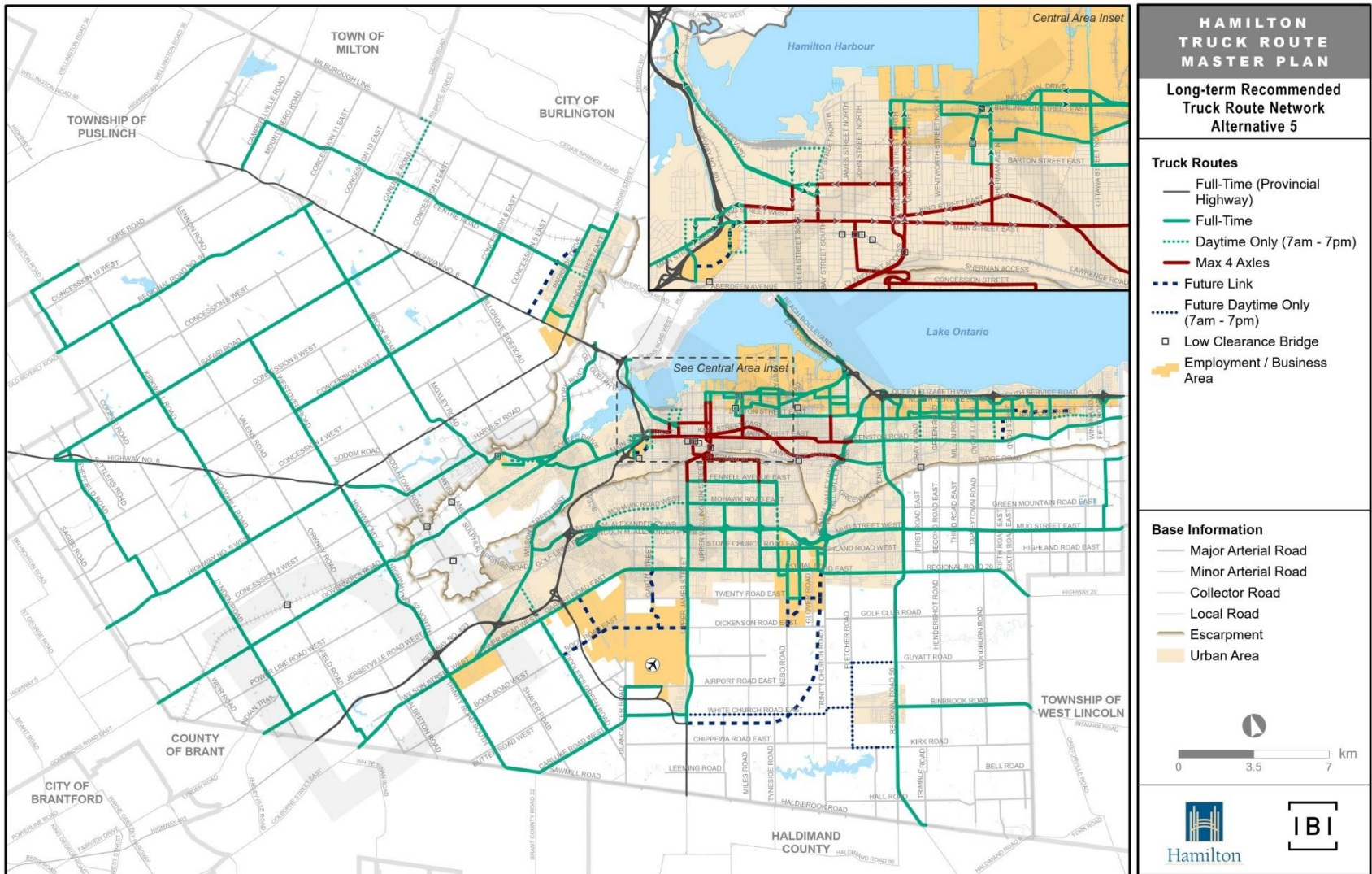
Ring Route Concept – Possible Route Choices (Grocery Store)



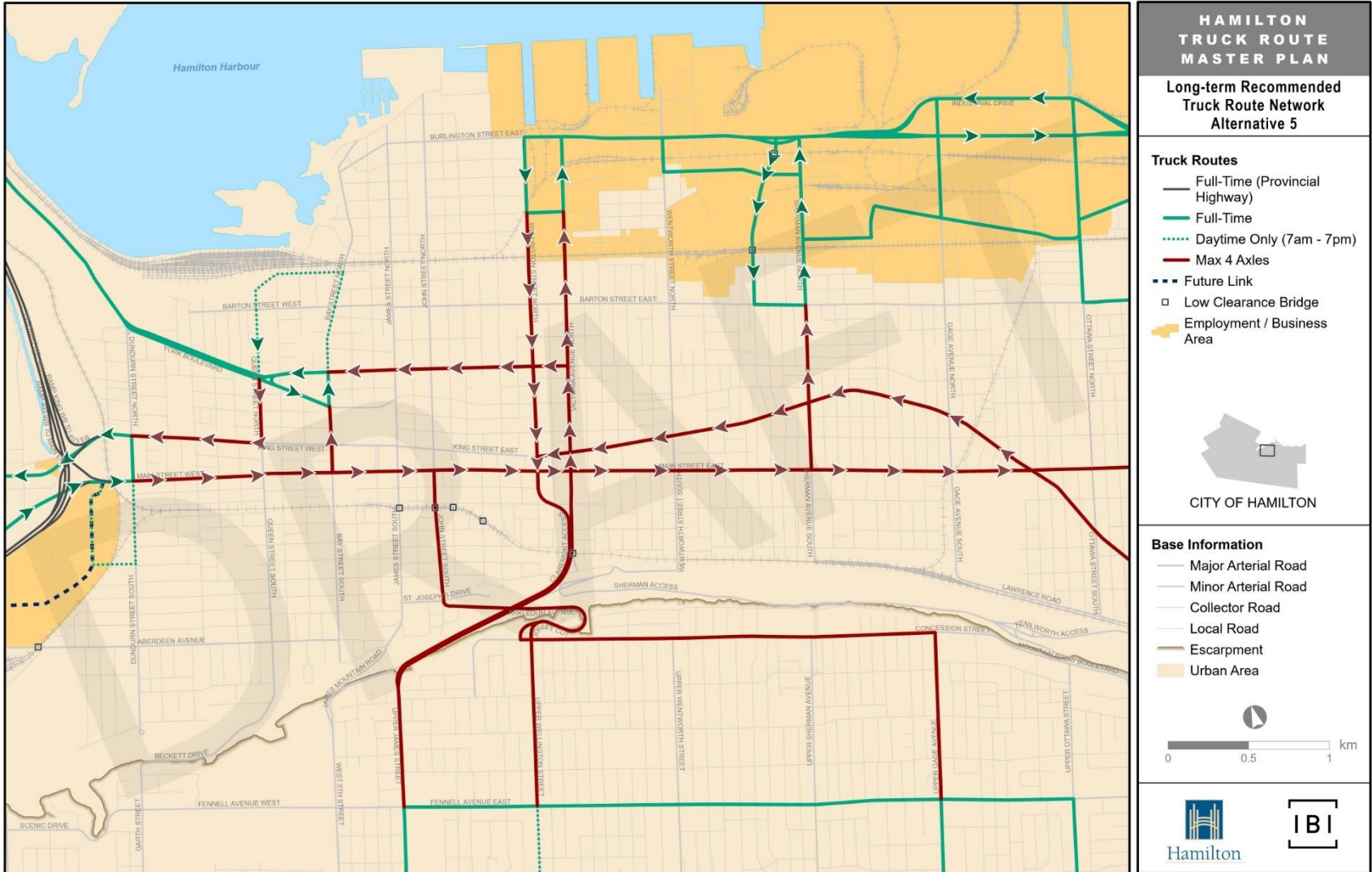
Ring Route Concept – Possible Route Choices (Hospital)



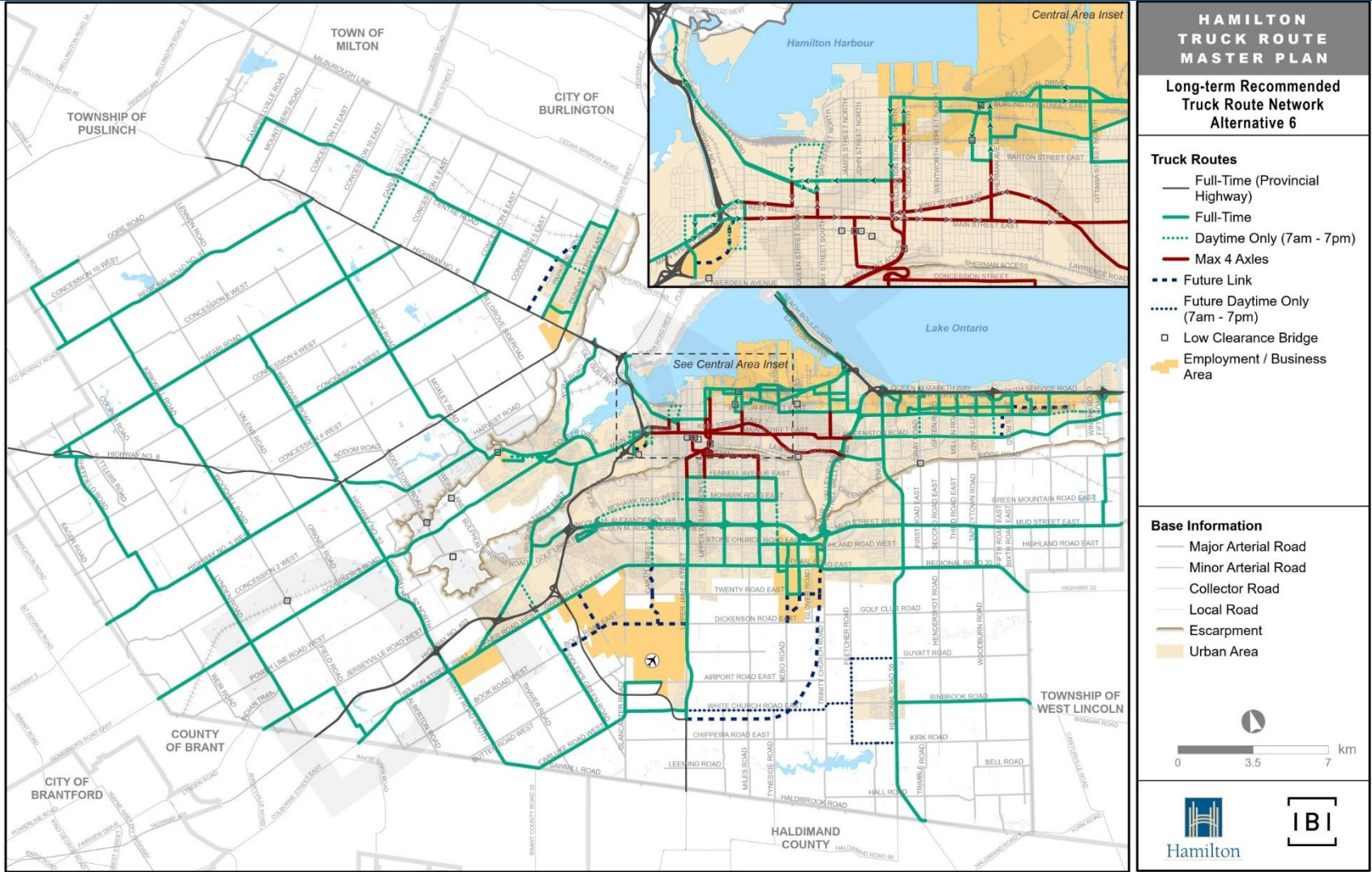
Alternative 5: A Ring Road Concept with Positive Guidance



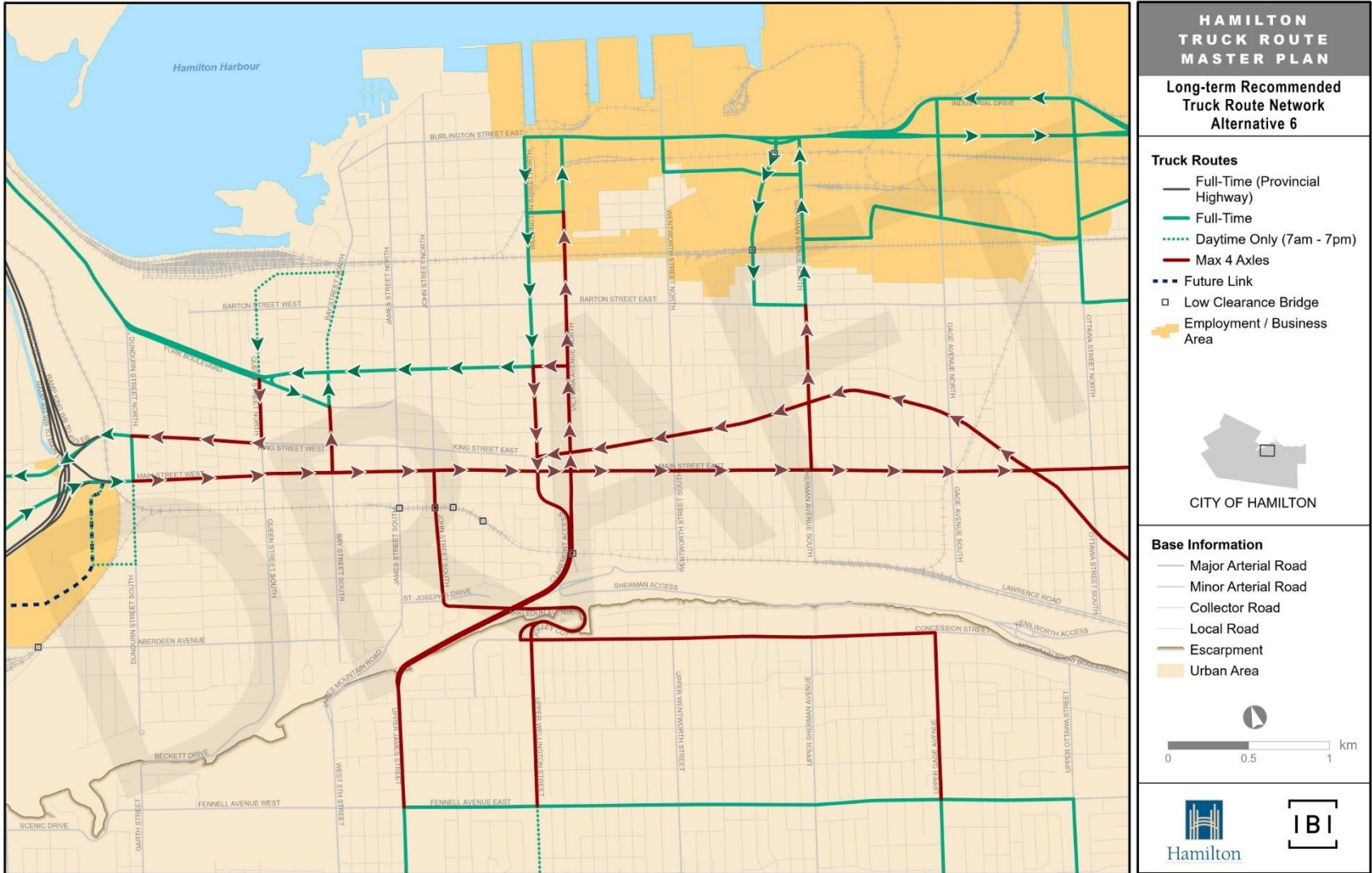
Alternative 5: Central Area Inset



Alternative 6: A Ring Road Concept with Positive Guidance and One Outbound Route to Highway 403



Alternative 6: Central Area Inset



Evaluation of Alternatives

Sensitive Receptors	Alternatives						
	Existing Network	Alternative 1	Alternative 2	Alternative 3*	Alternative 4*	Alternative 5	Alternative 6
Primary Schools	27	18 (1)	14 (4)	14 (4)	13	14 (4)	14 (4)
Secondary Schools	7	7	6 (1)	6 (1)	6	6 (1)	6 (1)
Hospitals	4	2 (2)	1 (3)	1 (2)	1	1 (3)	2 (2)
Long Term Care Facilities	9	5 (4)	5 (4)	5 (4)	5	5 (4)	5 (4)
Child Care Facilities	63	47 (2)	42 (6)	41 (6)	37	42 (6)	42 (6)

Note: Facilities presented in (parenthesis) are located on axle restricted truck routes

* In absence of positive guidance all roads can become part of the shortest path and conceivably expose more sensitive land uses to truck traffic (e.g. Dr. J.E. Davey Elementary School, Cathedral High School, et al.)

Feedback Received Since November 2021

Industry Feedback:

- Requested that City provide at least one inbound and outbound connection between the Industrial Bayfront and Highway 403
- Noted 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
- Driver shortages, the pandemic, and rise in fuel price has also led to significant supply chain issues and cost
- Axle limitations would require more trucks to move the same amount of freight, increasing traffic and congestion in certain areas
- Any Ring Road option that does not include a connection to Highway 403 would increase operational and supply chain costs for agroindustry further which will be passed to end users.

Feedback Received Since November 2021

Community Feedback:

- Prohibit industrial trucks from travelling through the core and city streets;
- 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

Recommended Revised Network Alternative

Based on Direction provided at the November 29, 2021 TRSC, and feedback from stakeholders, staff recommend the Ring Road Concept with Positive Guidance. This alternative:

- Precludes large and heavy passthrough vehicles (five-axle and above) from downtown and surrounding communities
- Reduces impacts (noise, vibration and emissions) of large and heavy trucks on sensitive receptors, low income, and vulnerable neighbourhoods
- Provides network connectivity and positive guidance to local delivery trucks
- Encourages use of small and medium trucks for local deliveries
- Potential for improved air quality and all road user safety

Implementation Strategies & Recommendations



Implementation Strategies

- Focus on limiting larger trucks by adding restrictions (maximum 4-axle) in downtown.
- Implement Geometric Improvements (i.e. separated cycling infrastructure along truck routes, Well-designed intersection and mid-blocks for improved safety)
- Operational Improvements (i.e. way finding tools such as ON-511, restriction of truck to inner lanes on multilane highways, speed limit reduction and automated speed enforcement, address operational issues along Burlington Street)
- Collaborate with Ministry of Transportation Ontario (MTO) and Ministry of Environment, Conservation and Parks (MECP) to enforce emission tampering and use of engine braking at problems areas in Hamilton
- Modify segments once necessary approvals and improvements have been made

Recommendations

- a) That “Alternative Five - Ring Road Concept with Positive Guidance Concept” 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

Recommendations

- 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).



Hamilton

THANK YOU



Hamilton

QUESTIONS?