

Hamilton Truck Route Master Plan Review and Update

February 28 , 2022



Hamilton

Planning and Economic Development Department
Transportation Planning and Parking

Outline

- Study Recap
- Recommended Truck Route Network and Sub-committee Recommendations
- Alternative Network Solutions
- Potential Infrastructure Improvements
- Next Steps

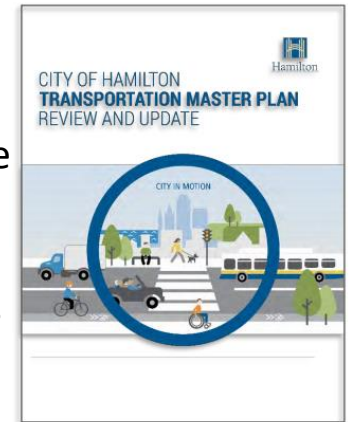
Truck Route Master Plan (TRMP) Review Objectives

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.

The Vision of the City of Hamilton

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

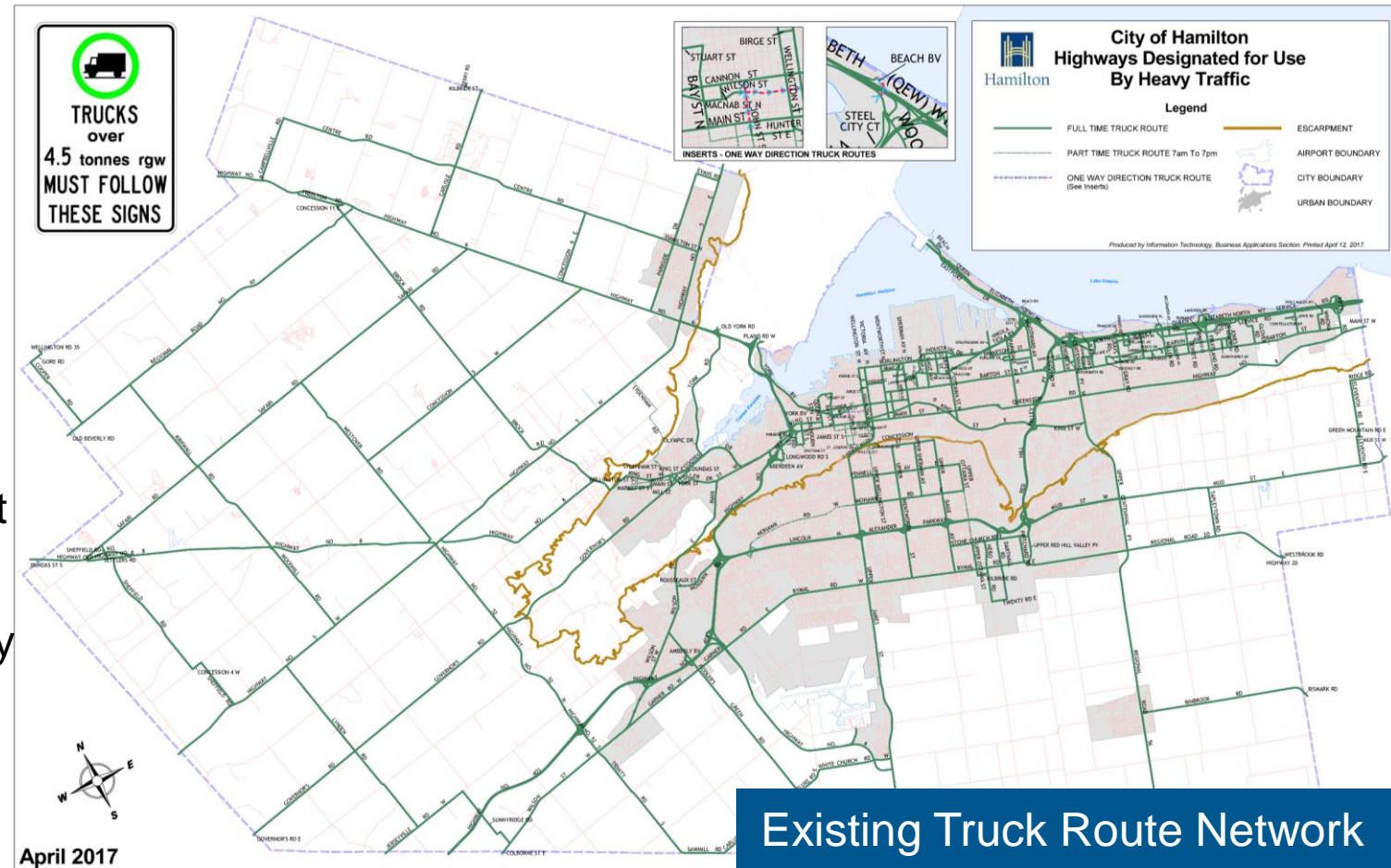
***To be the best
place to raise a
child and age
successfully***

What is a Truck Route Network?

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

Any vehicle or trailer with a registered gross weight of more than **4,500 kg** is 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.



What is a 'Truck'?

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)



Recommended Truck Route Network - as of November 2021




HAMILTON TRUCK ROUTE MASTER PLAN

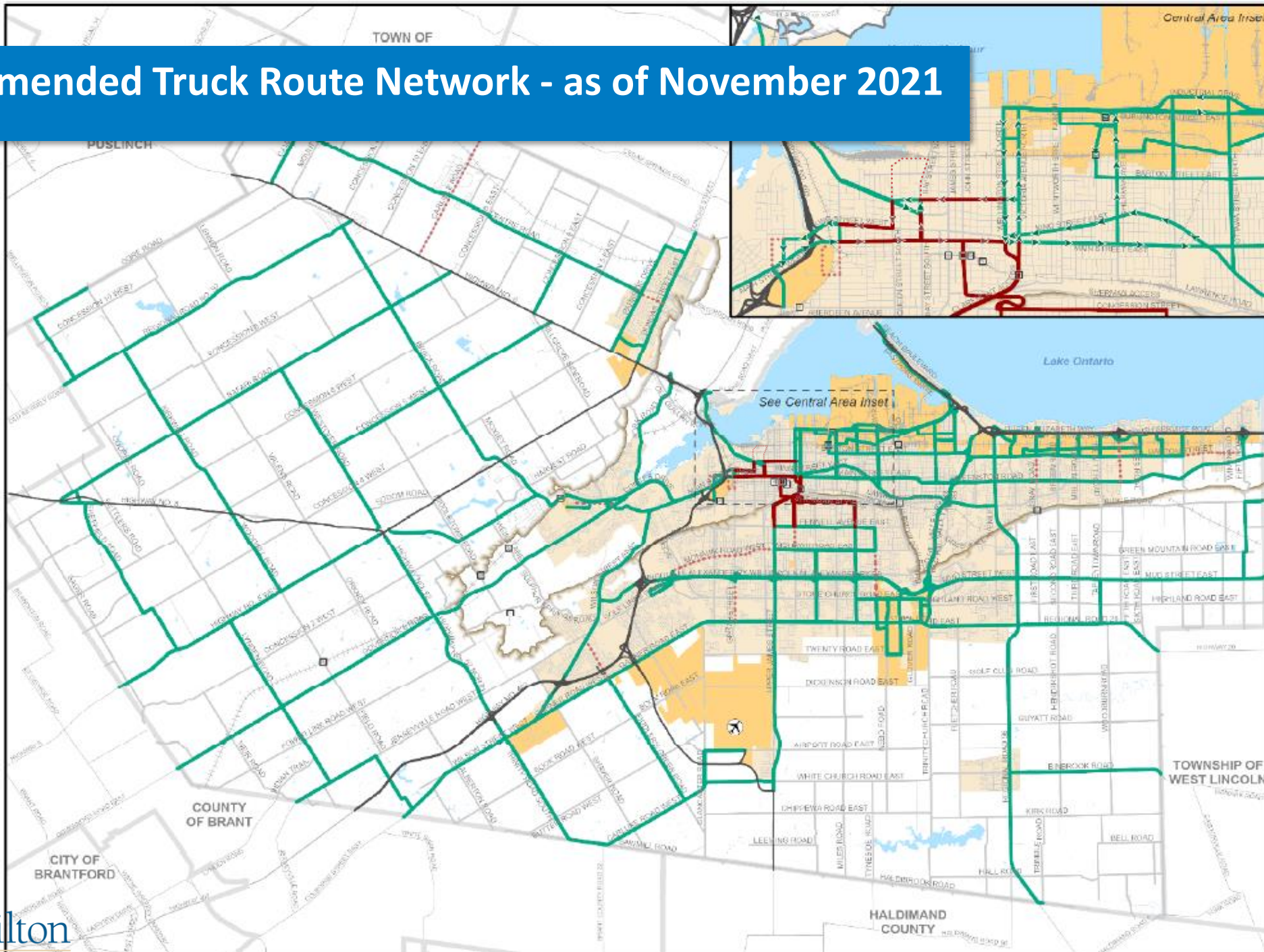
Recommended Truck Route Network

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



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

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



Alternative Truck Routes Network Options

Inventory of City-wide Sensitive Land Uses

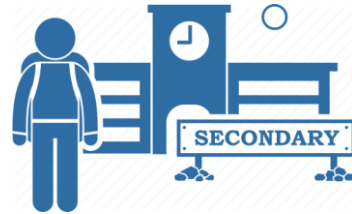
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Potential Network Alternatives

Alternative 1

Draft Recommended Truck Route Network

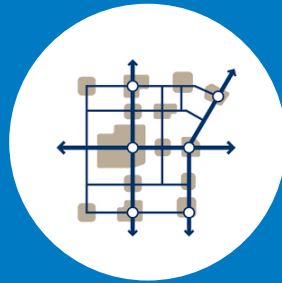
Draft Recommended Network
(November 29)

Key Features

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

Alternative 2

Expanded Restriction Area

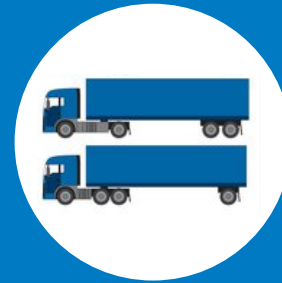


Key Features

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

Alternative 3

Expanded Restriction Area with Max 4-Axle Network

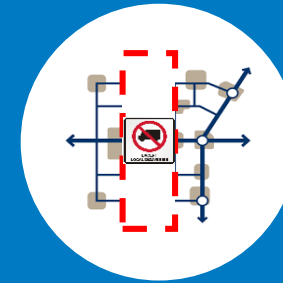


Key Features

- Max 4-Axle restriction on most lower city routes and parts of the mountain

Alternative 4

No Downtown Routes

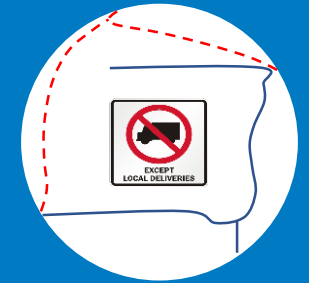


Key Features

- Max 4-Axle restriction on most lower city routes and parts of the mountain
- No east-west routes through the downtown, between Wellington Street and Bay Street

Alternative 5

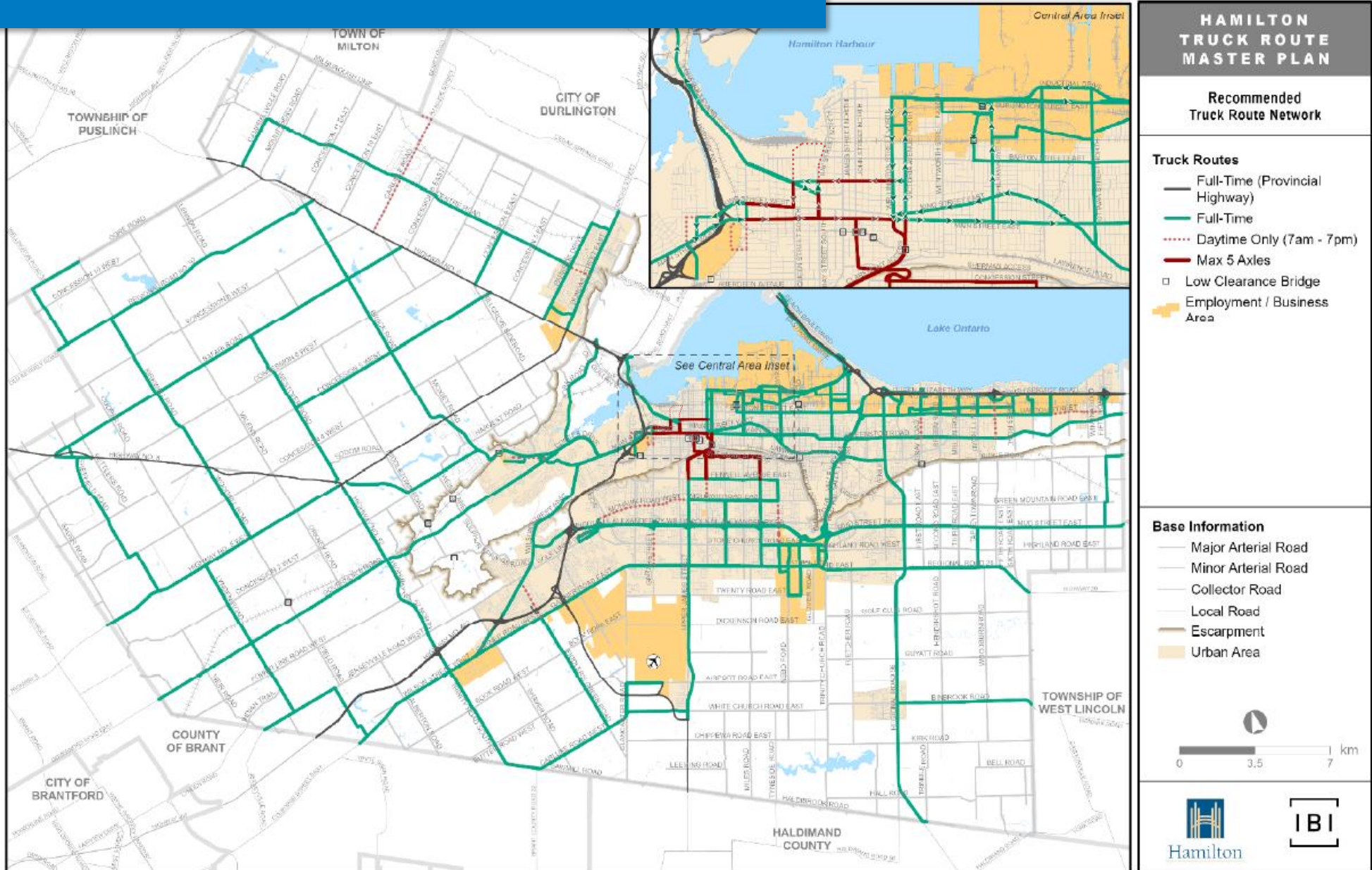
Ring Road Concept



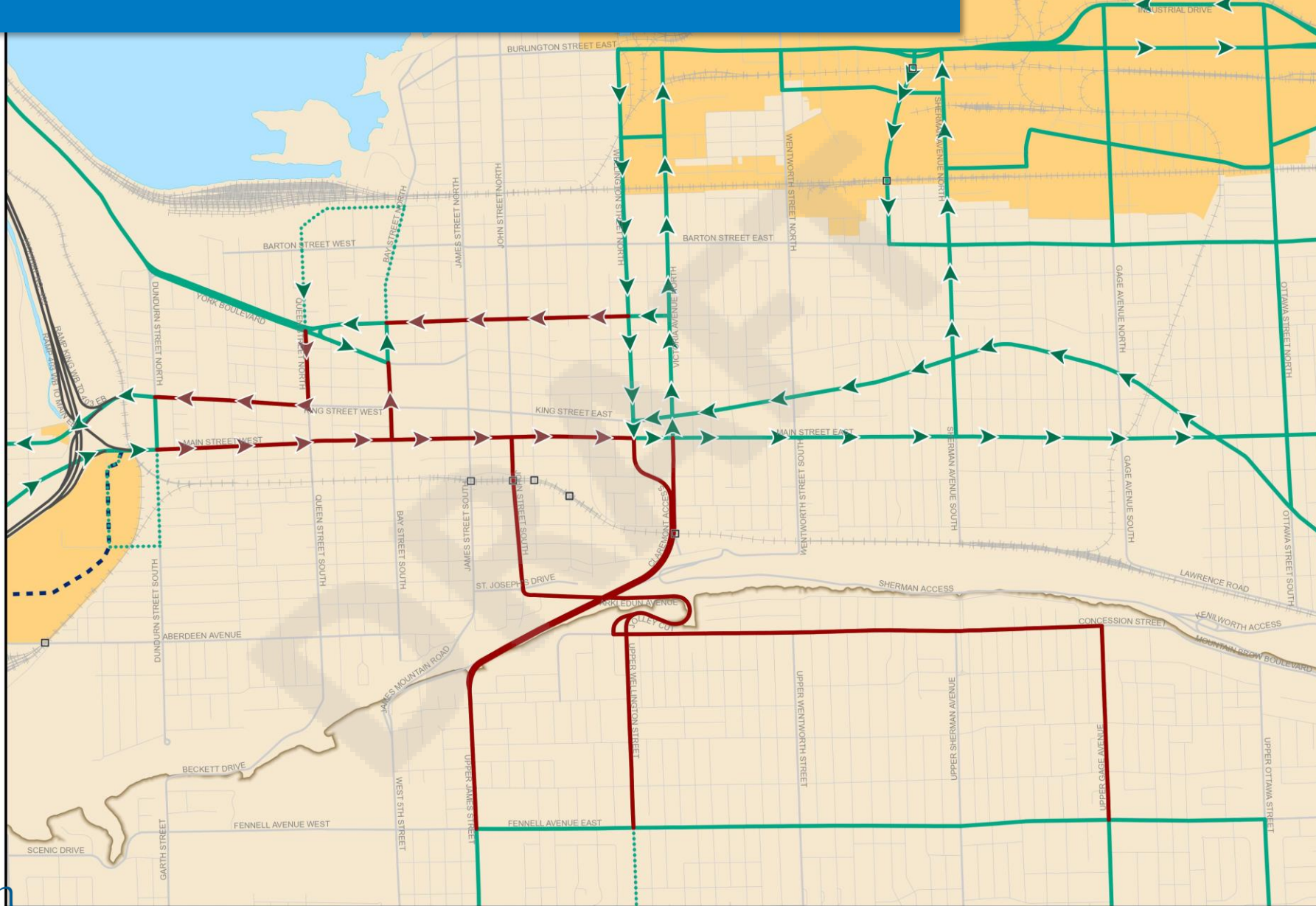
Key Features

- No truck routes in select communities in the lower city and mountain

Alternative 1: Draft Recommended Truck Route Network



Alternative 1: Draft Recommended Truck Route Network



HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

Truck Routes

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



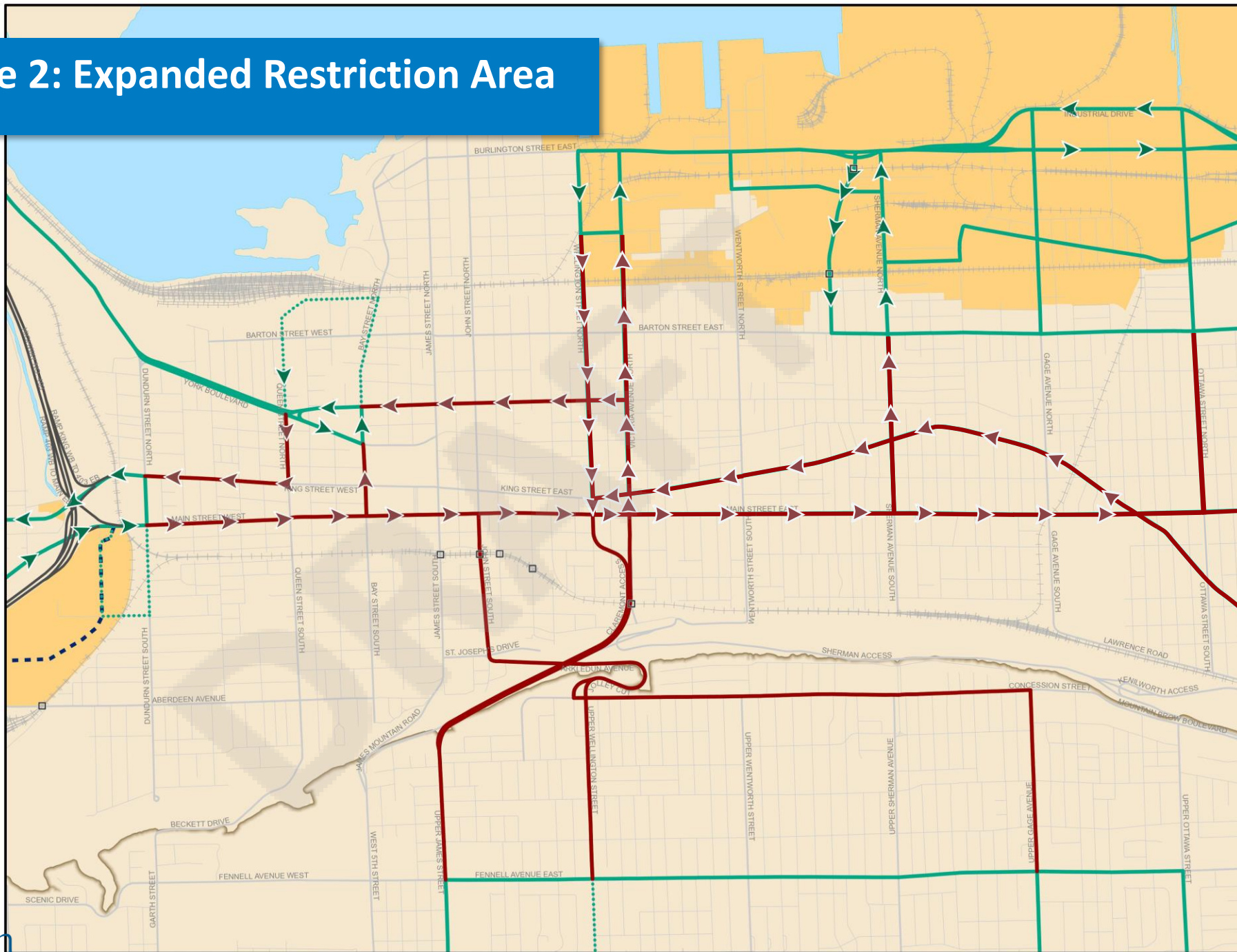
CITY OF HAMILTON

Base Information

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- Minor Arterial Road
- Collector Road
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Alternative 2: Expanded Restriction Area



HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

Truck Routes

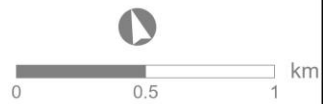
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Alternative 3: Expanded Restriction Area with Max 4-Axle Network

Long-term Recommended
Truck Route Network

Truck Routes

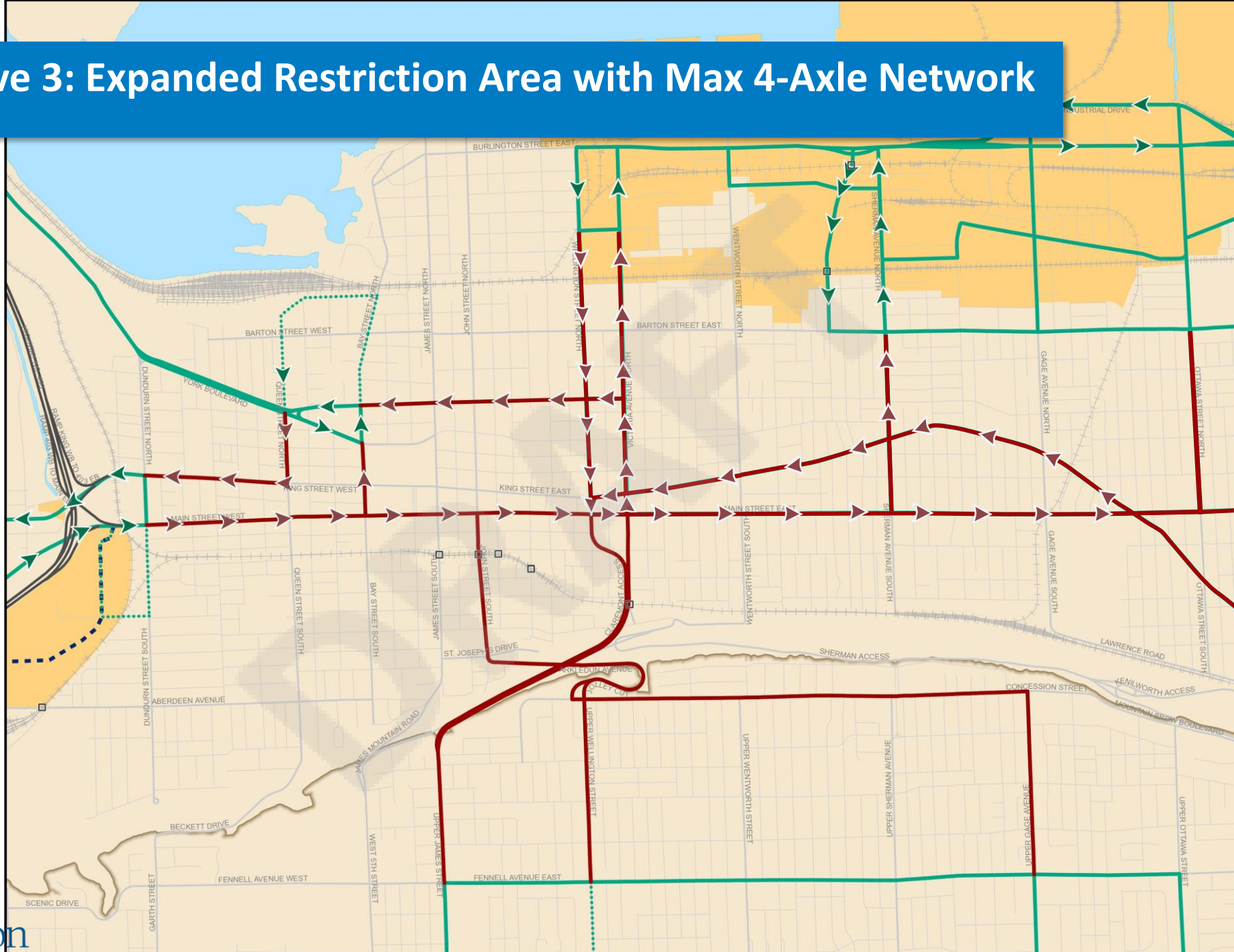
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CITY OF HAMILTON

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Alternative 4: No Downtown Routes with Max 4-Axle Network

HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

Truck Routes

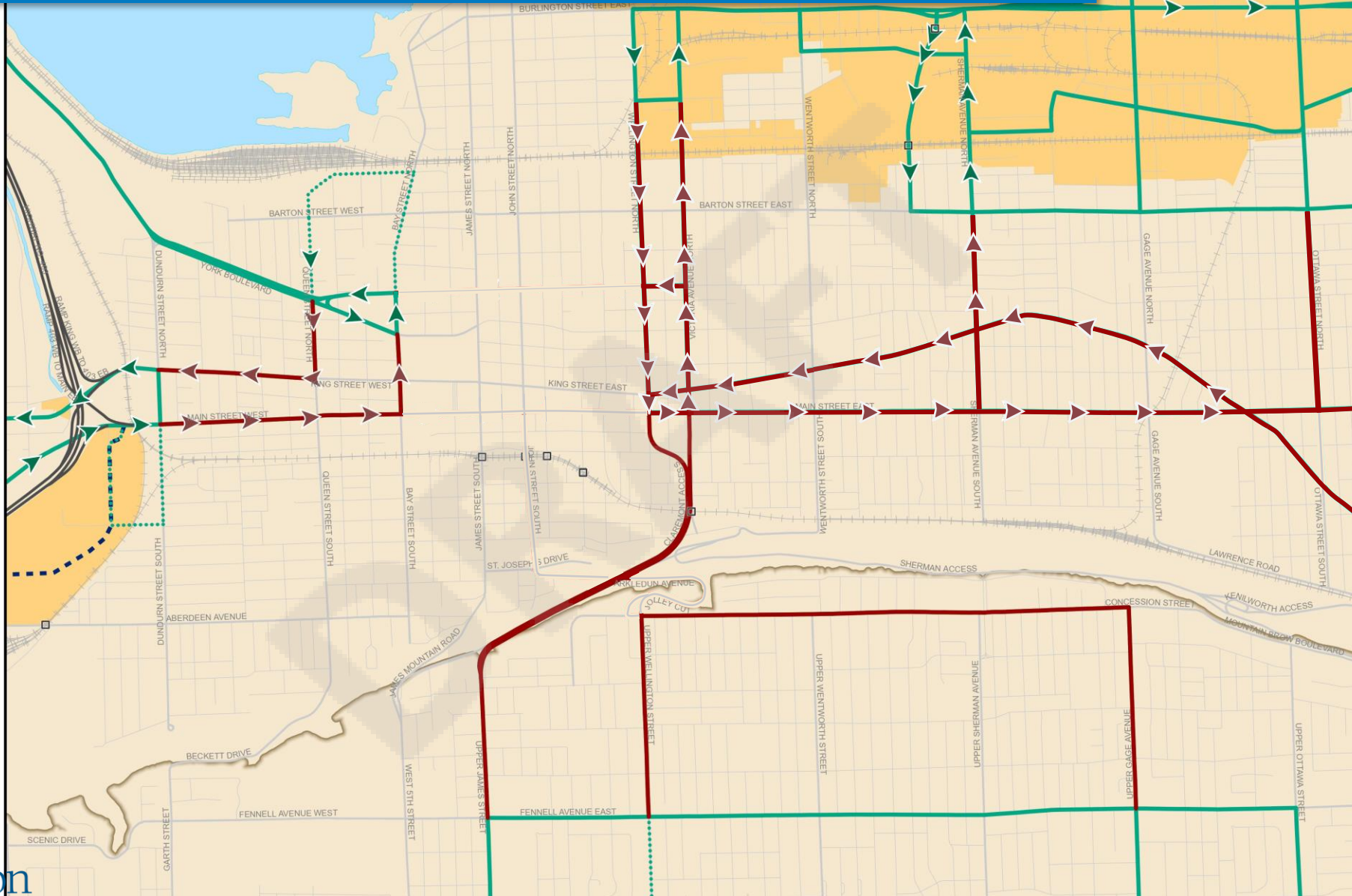
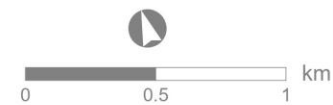
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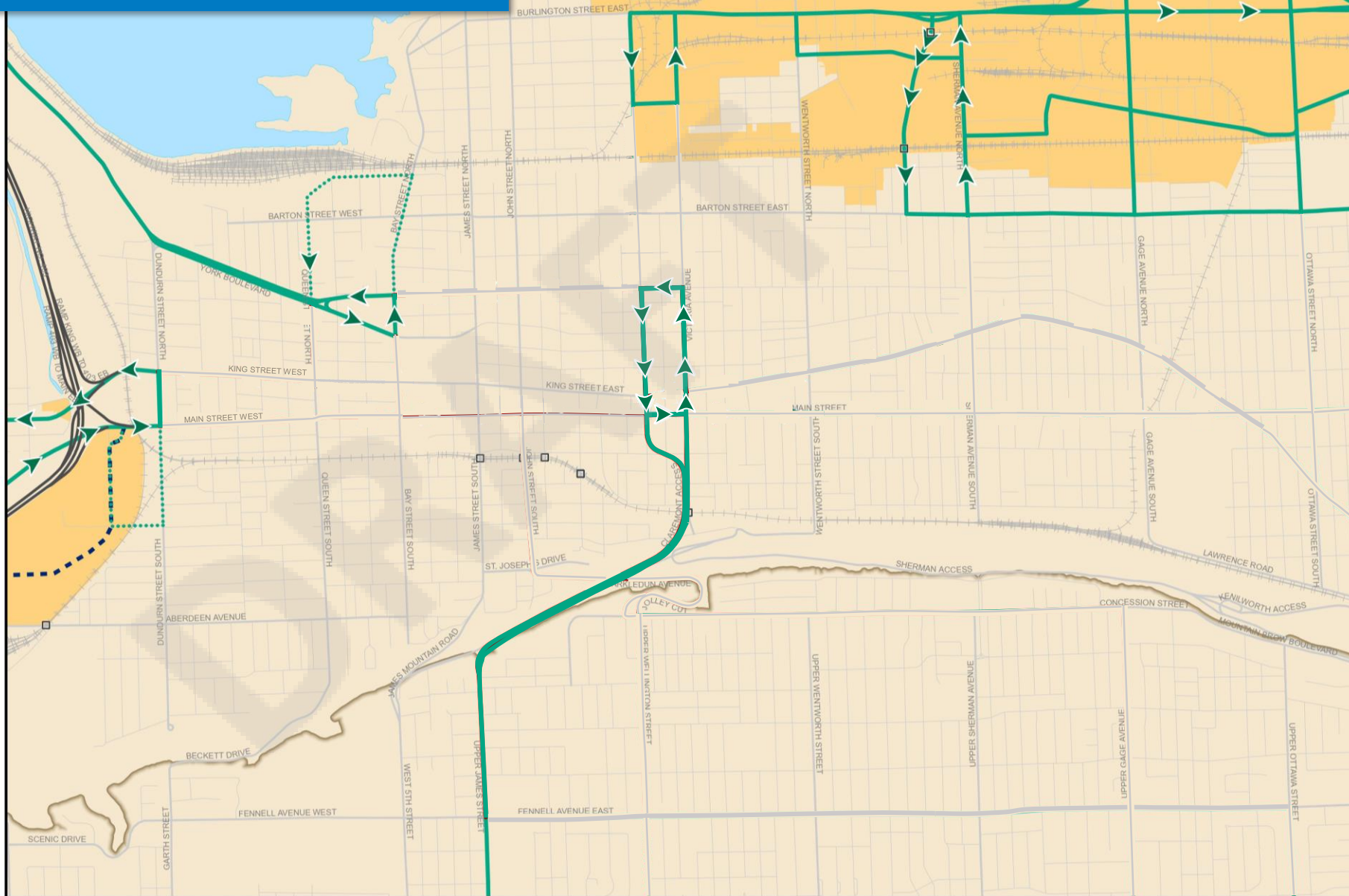
CITY OF HAMILTON

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Alternative 5: Ring Road Concept



HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

- Truck Routes**
- Full-Time (Provincial Highway)
 - Full-Time
 - ⋯ Daytime Only (7am - 7pm)

- Low Clearance Bridge
- Employment / Business Area



Base Information

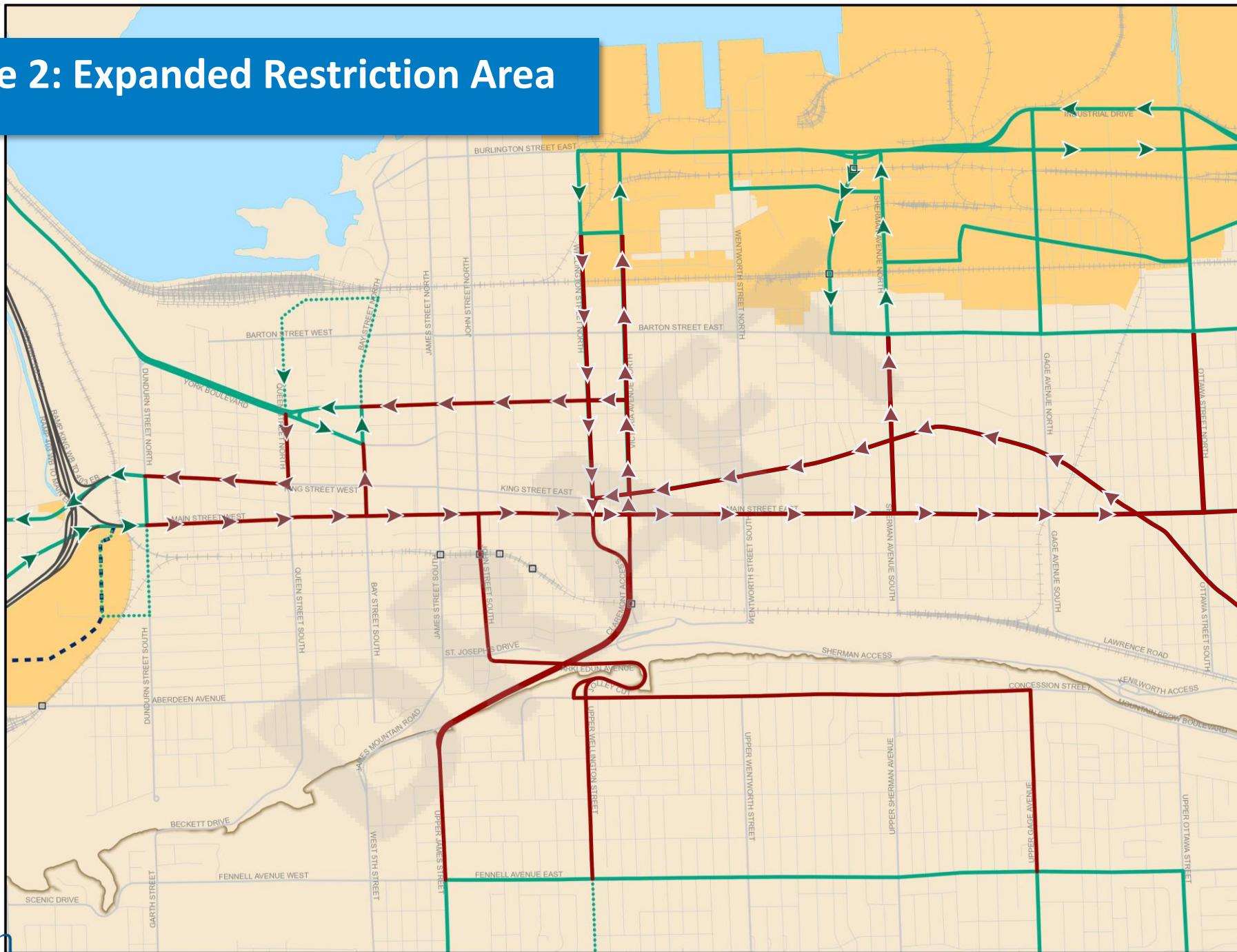
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Alternative Truck Routes Network Options

Alternative 2: Expanded Restriction Area



HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

Truck Routes

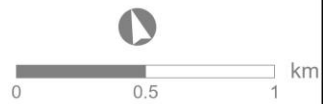
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CITY OF HAMILTON

Base Information

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Maximum 5-Axle Segments: Sample Allowable Trucks



Many tractor-trailers (van style) 5-axle



Vehicle carrier with trailer 5-axle



Refuse truck 3-axle



Dump truck 4-axle



Cement Mixer 4-axle



Delivery Van 2-axle



Film Studio tractor trailer 5-axle

Maximum 5-Axle Segments: Sample Prohibited Trucks



Tractor with two tanker trailers 8-axle



Tractor with two dump trailers 7-axle



Dump truck with trailer 6-axle



Tractor with dump trailer 7-axle



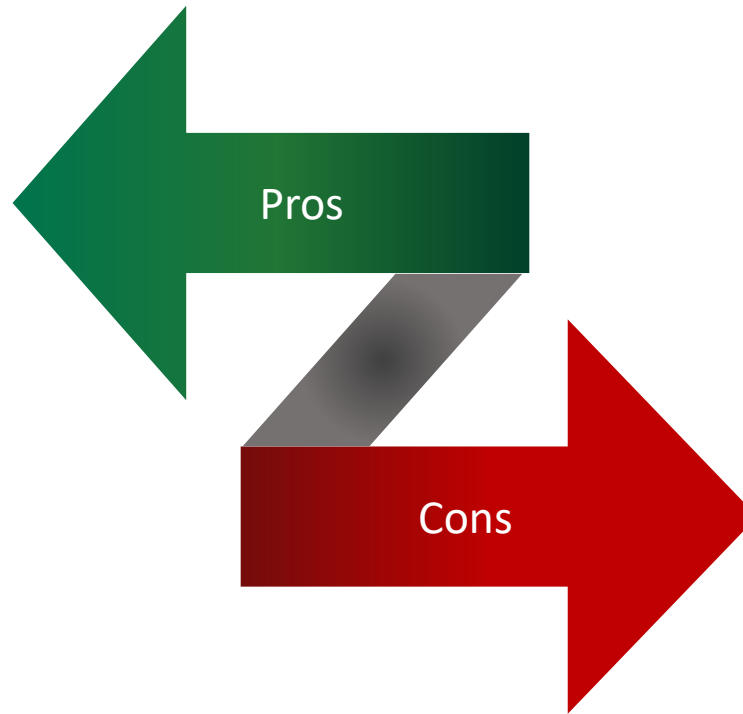
Tractor with tanker trailer 6-axle



Tractor with soft-sided van 7-axle

Alternative 2: Expanded Restriction Area

- Precludes large and heavy non-local delivery trucks from passing through downtown and surrounding communities
- Shifts unavoidable impacts (noise, vibration and carcinogenic pollutant) of large and heavy trucks away from sensitive receptors and residential neighbourhoods
- Potential for road user safety improvement
- Provides network connectivity, truck accessibility and positive guidance for local delivery trucks
- Matches local delivery vehicle class with road typology
- Supports local economic growth and development



- Requires increased enforcement resources and tools
- Shifts the impact of truck traffic to communities adjacent to RHVP, The LINC and Burlington Street.
- Increases travel time and operational cost for large truck operators with a destination to Port and industrial areas

Sensitive Receptors on Truck Routes:



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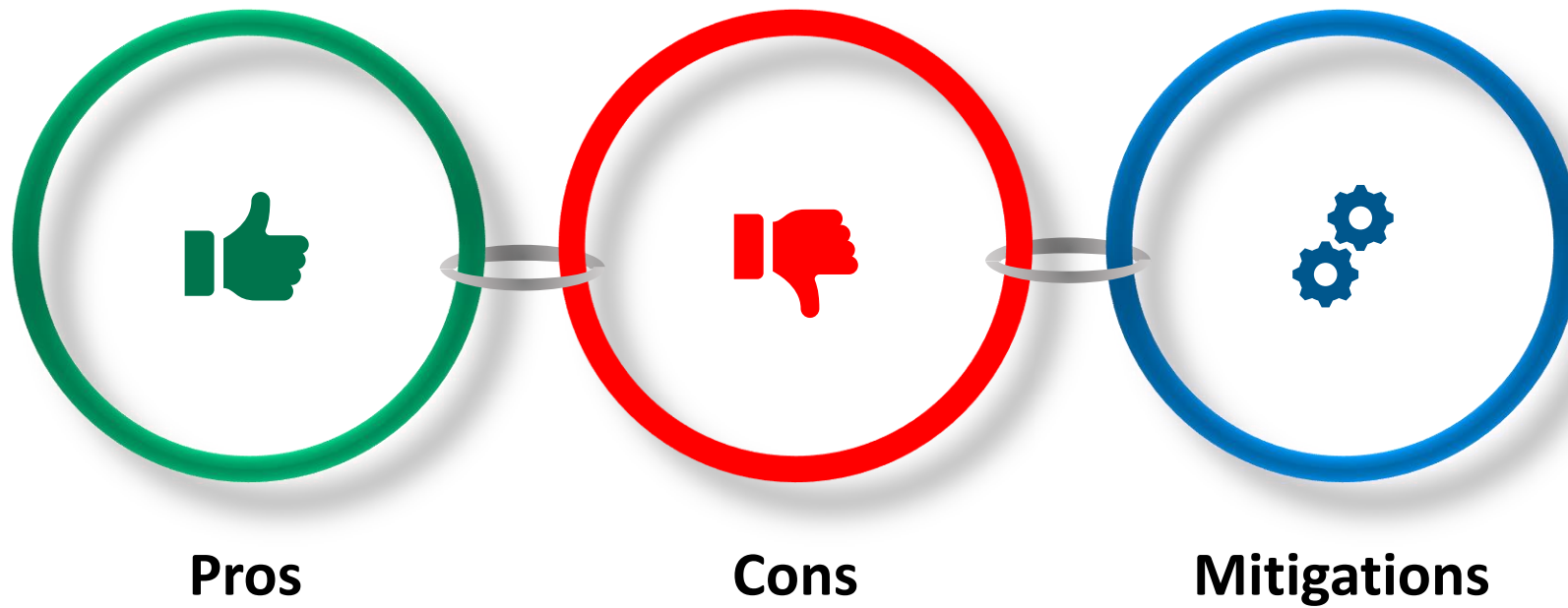


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48

Discussion



Alternative 3: Expanded Restriction Area with Max 4-Axle Network

HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

Truck Routes

- Full-Time (Provincial Highway)
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Maximum 4-Axle Segments: Sample Allowable Trucks



Maximum 4-Axle Segments: Sample Prohibited Trucks



Tractor with two tanker trailers 8-axle



Film Studio tractor trailer 5-axle



Tim Hortons Truck 5-axle



Concrete Mixer 5-axle



Pet Valu tractor trailer 5-axle



Tractor with dump trailer 7-axle



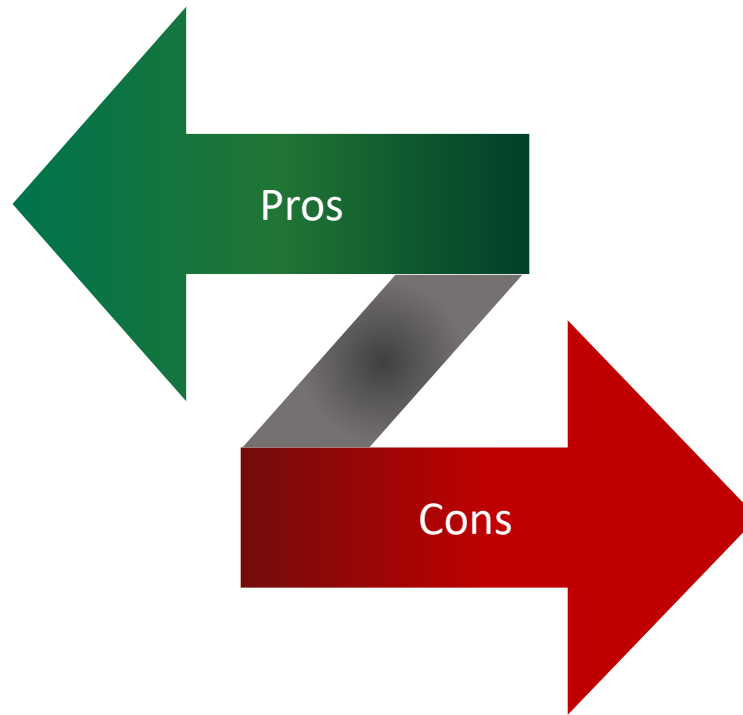
Tractor with tanker trailer 6-axle



Tractor with soft-sided van 7-axle

Alternative 3: Expanded Restriction Area with Max 4-Axle Network

- Restricts large and heavy vehicles from downtown and surrounding communities
- Reduces noise pollution and adverse impacts on sensitive receptors and neighbourhoods
- Provides network connectivity and positive guidance to local delivery trucks
- Encourages use of small & medium trucks for local deliveries
- Shifts the unavoidable impact of truck traffic away from low income, densely populated and vulnerable communities



- Prohibits multi-point delivery to local business by 5-axle trucks (e.g. No-Frills, Hospitals, Tim Hortons)
- Requires increased enforcement resources and tools (difficult to distinguish local delivery and pass through trucks with 5-axle)
- Increases the impact of truck traffic on communities adjacent to RHVP, The LINC and Burlington Street
- Increases travel time and operational cost for trucks with 5-Axle and over with a destination to Port and industrial areas

Sensitive Receptors on Truck Routes



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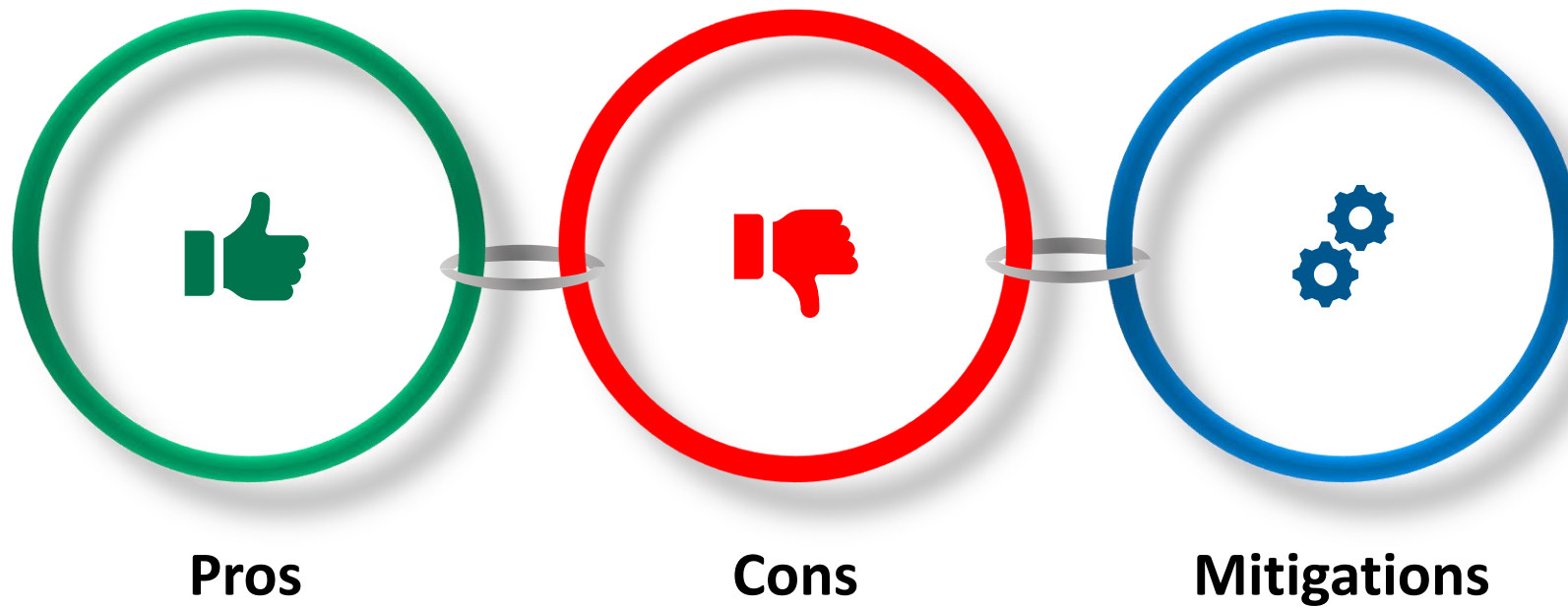


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Discussion



Alternative 4: No Downtown Routes with Max 4-Axle Network

HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

Truck Routes

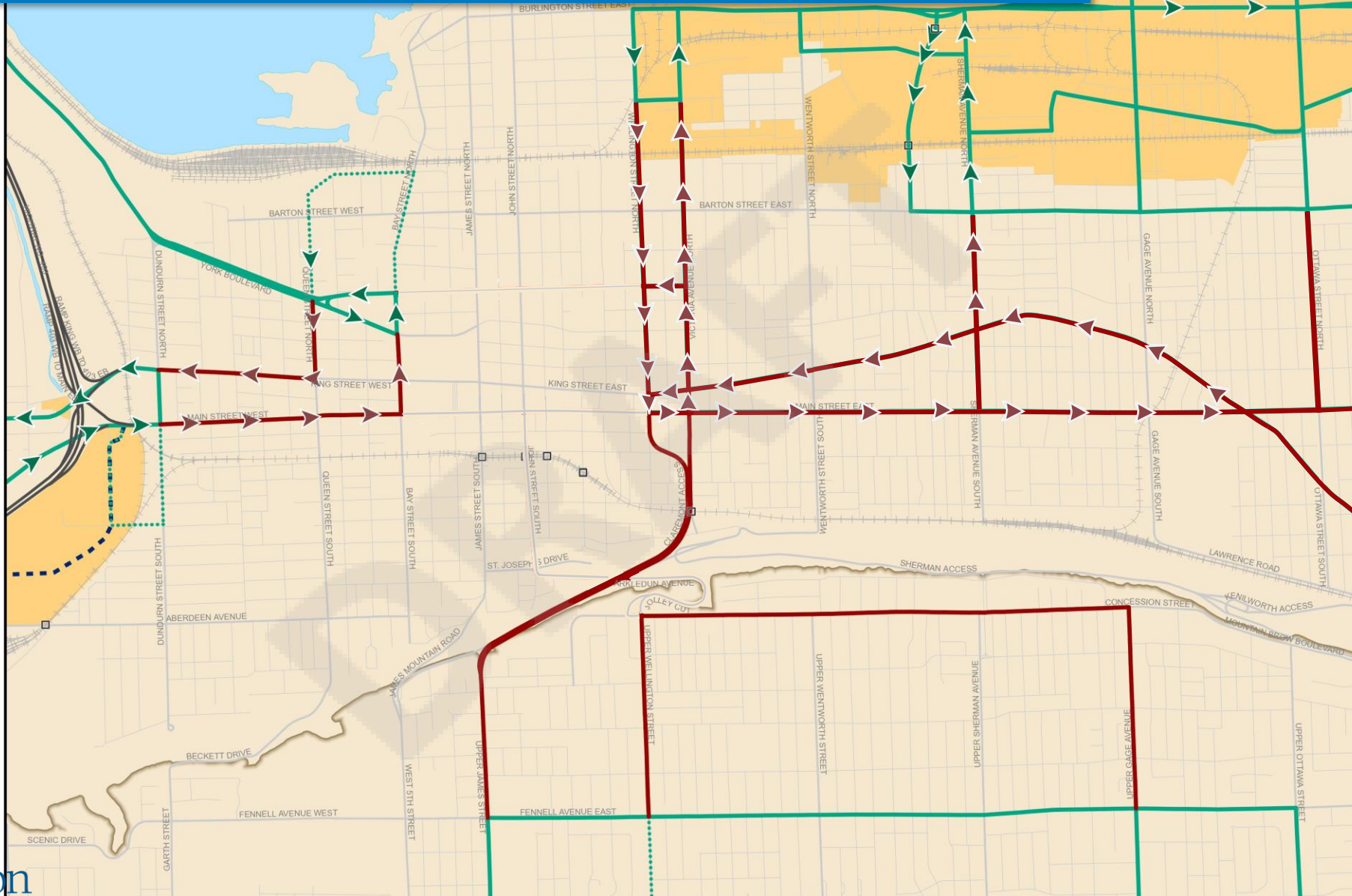
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CITY OF HAMILTON

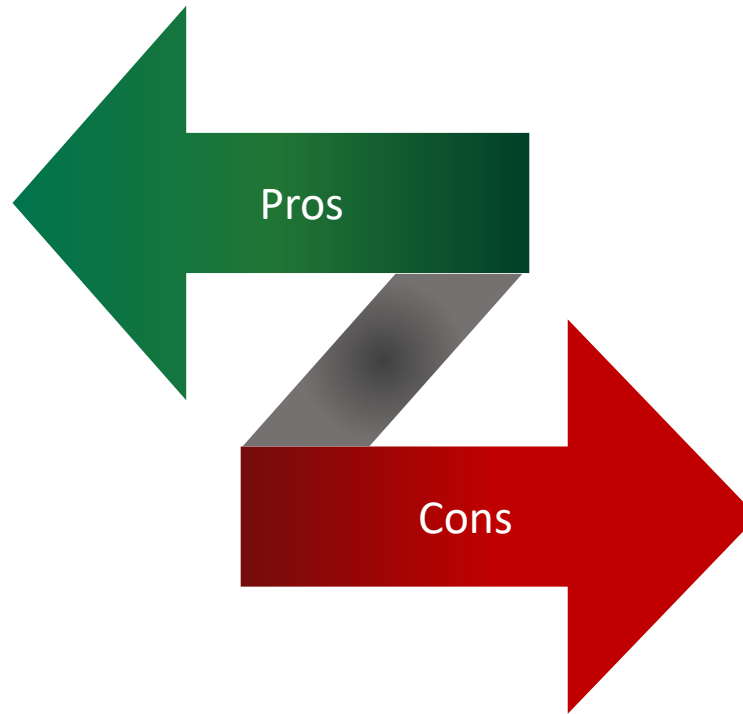
Base Information

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Alternative 4: No Downtown Routes with Max 4-Axle Network

- Restricts large and heavy vehicles from downtown and surrounding communities
- Reduces noise pollution and adverse impacts on sensitive receptors and neighbourhoods
- Encourages use of small & medium trucks for local deliveries
- Potential for improved liveability, walkability and vibrancy in the downtown and surrounding neighbourhoods
- Shifts the unavoidable impact of truck traffic away from low income, densely populated and vulnerable communities



- Prohibits multi-point delivery to local business by 5-axle trucks (e.g. No-Frills, Hospitals, Tim Hortons)
- Requires increased enforcement resources and tools
- Disrupts the existing freight management for local business using 5-axle trucks
- Does not provide network connectivity, positive guidance and truck accessibility for local delivery trucks in downtown
- Increases the impact of truck traffic on communities adjacent to RHVP, The LINC and Burlington Street
- Exposes additional 6 elementary schools to truck traffic

Sensitive Receptors on Truck Routes



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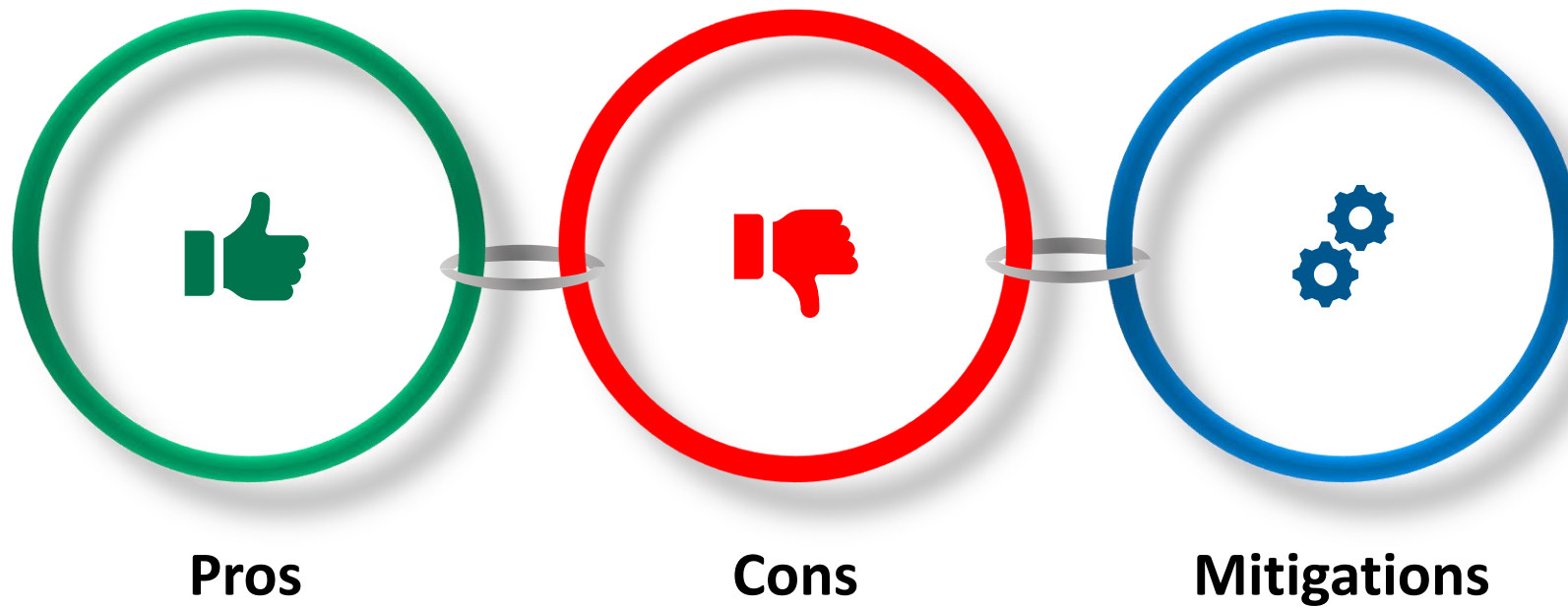


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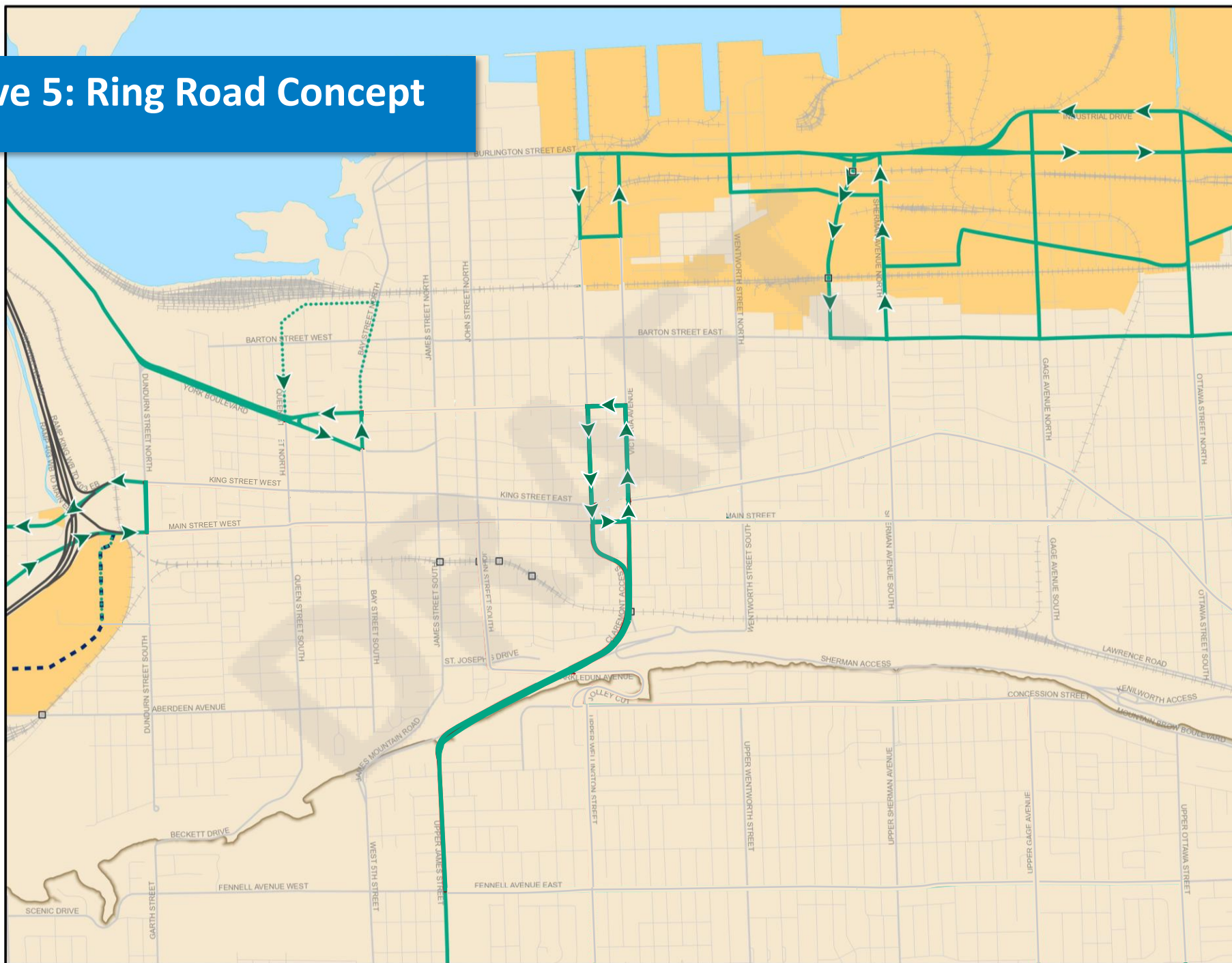


48

Discussion



Alternative 5: Ring Road Concept



HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

Truck Routes

- Full-Time (Provincial Highway)
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- Daytime Only (7am - 7pm)

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- Employment / Business Area



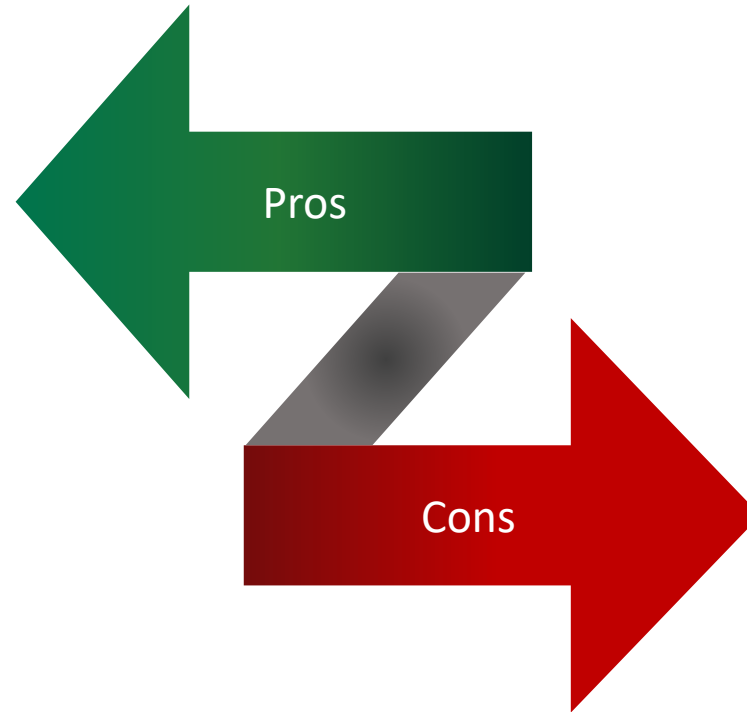
Base Information

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Alternative 5: Ring Road Concept

- Restricts large and heavy vehicles from downtown and select lower city and mountain communities
- Provides truck accessibility to and from key truck generators to local and provincial expressways via at least one full time truck route
- Potential for improved walkability and vibrancy in the downtown and surrounding neighbourhoods



- Provides local delivery truck drivers full autonomy of route choice
- Exposes all elementary schools, hospitals and other sensitive receptors to truck traffic
- Requires exorbitant enforcement resources and tools
- Unequitable truck route distribution across the city
- Does not form a network nor provides connectivity and redundancy
- Increases safety concerns due to lack of positive guidance
- All escarpment crossings will be treated equally by local delivery trucks (Kenilworth Access, James Mountain Drive, Claremont Access and Becket Drive)

Sensitive Receptors on Truck Routes



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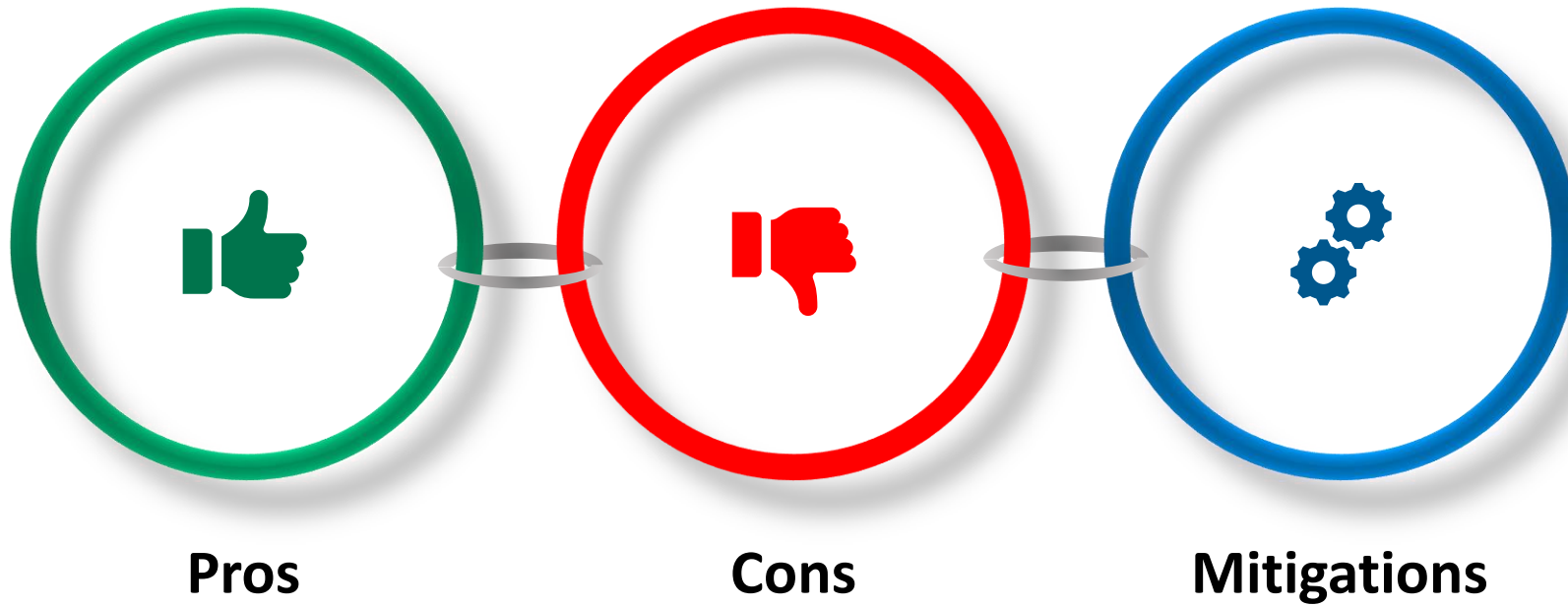


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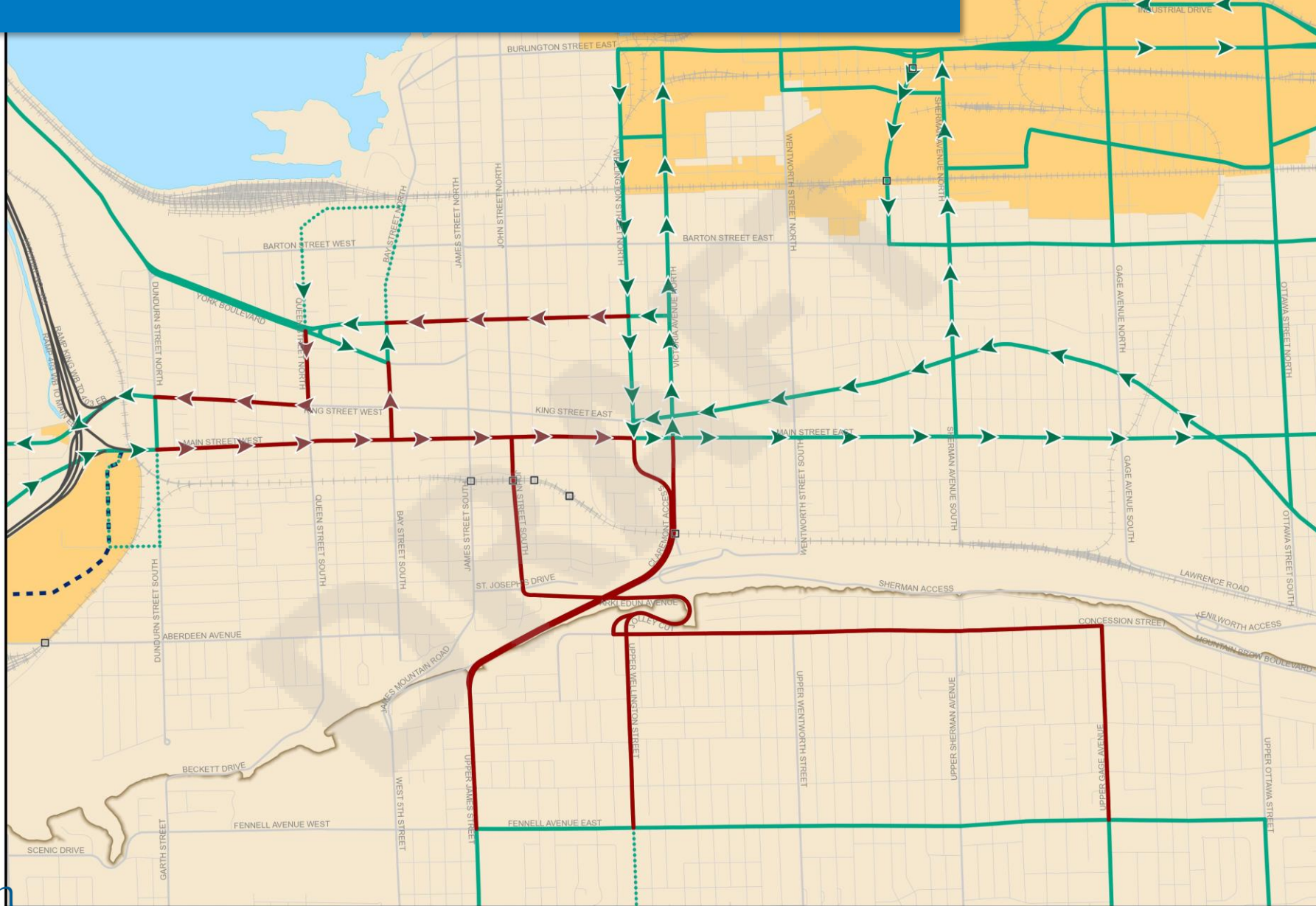


37

Discussion



Alternative 1: Draft Recommended Truck Route Network



HAMILTON TRUCK ROUTE MASTER PLAN

Long-term Recommended Truck Route Network

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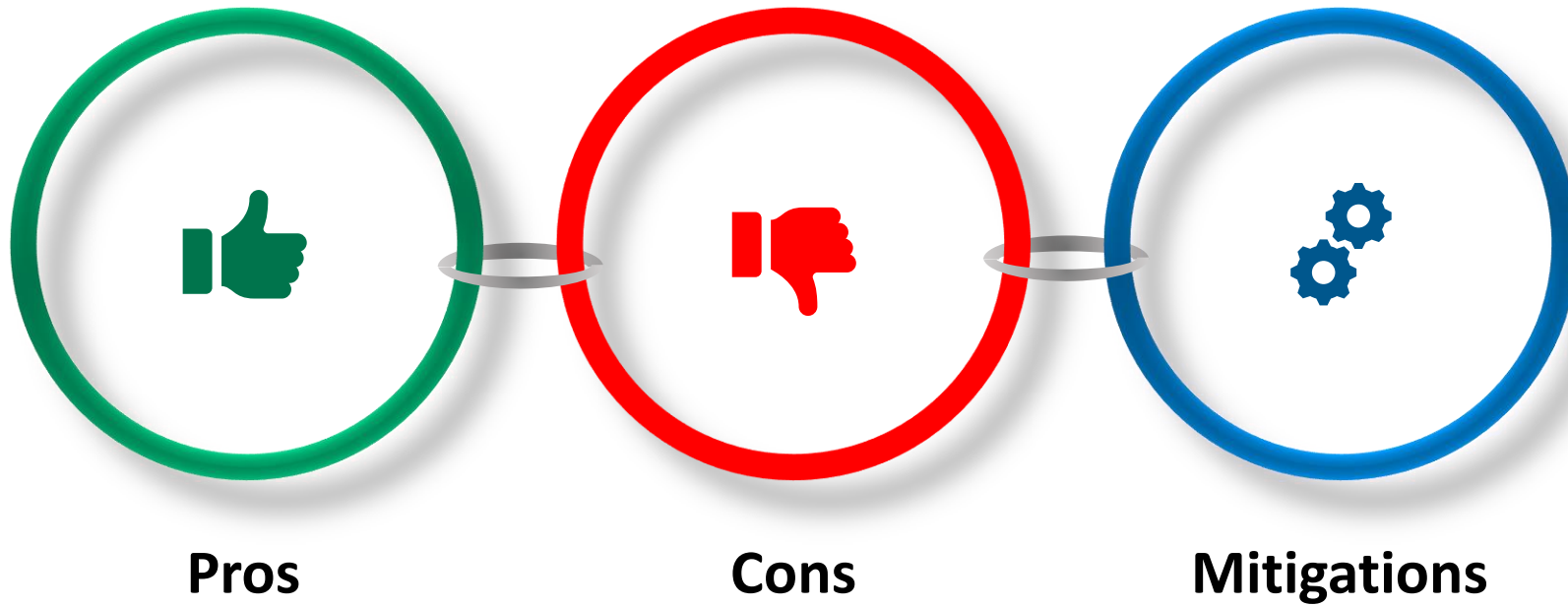
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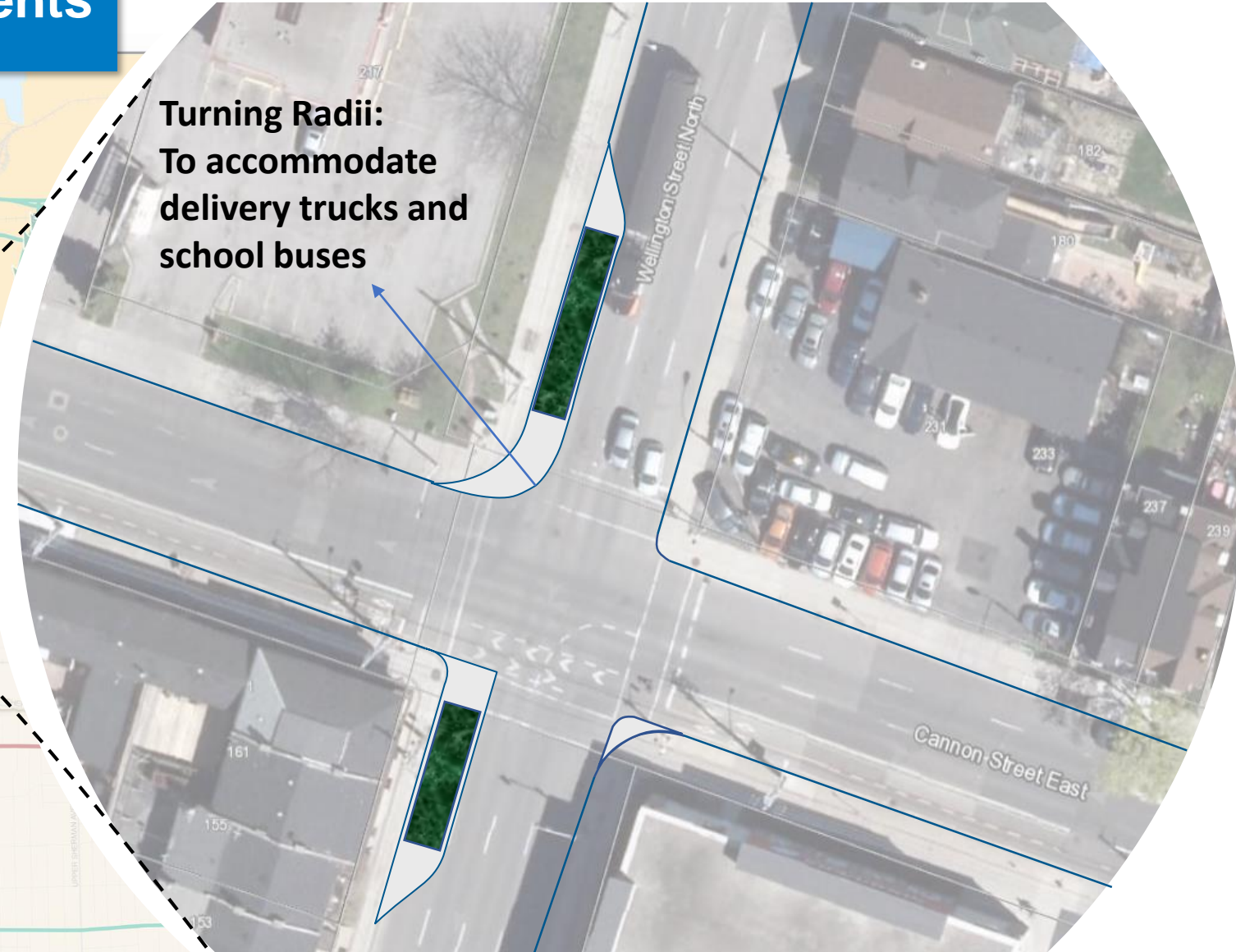
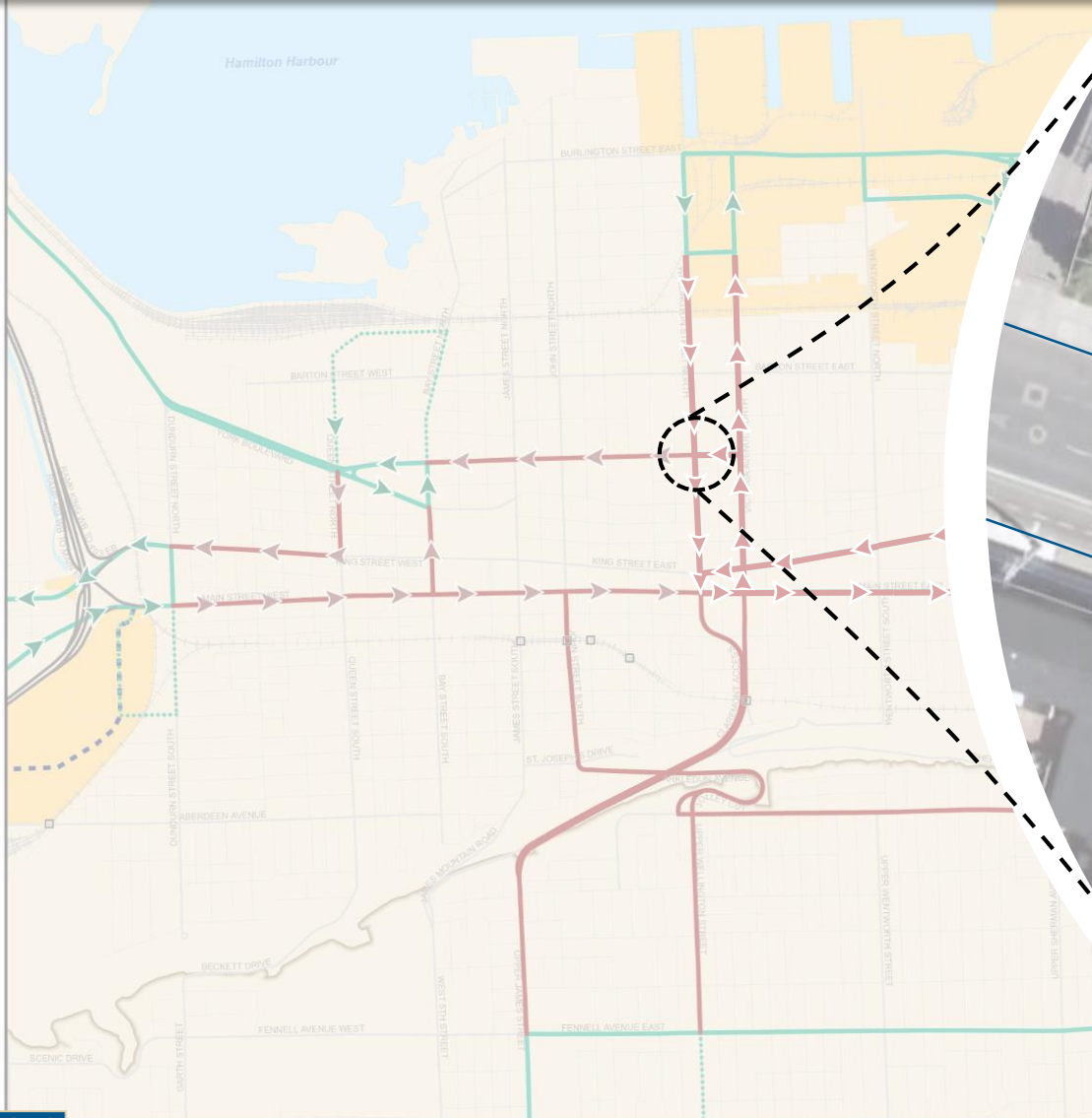
Preferences





Implementation Strategies

Potential Geometric Improvements



Wellington Street North at Cannon Street East

Next Steps



March/April 2022

Present the Truck Route Network Alternatives and the Preferred Network to the Truck Route Sub-committee, Public Works and City Council



Q2 - 2022

Project File Report
Develop a detailed sign installation plan; an enhanced commercial vehicle enforcement strategy, and finalize By-Law changes and related schedules

Thank you!

Upcoming Truck Route Sub-Committee Meeting - March 28, 2022

