IMP Update – Fall 2021

September 27th 2021

ITAC Meeting

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Agenda

- Recap of IMP process and decisions taken
- Draft Problem and Opportunity Statements
- Individual Mode Plans
- Integration of plans - feasibility screening
- Draft Preferred Integrated Network

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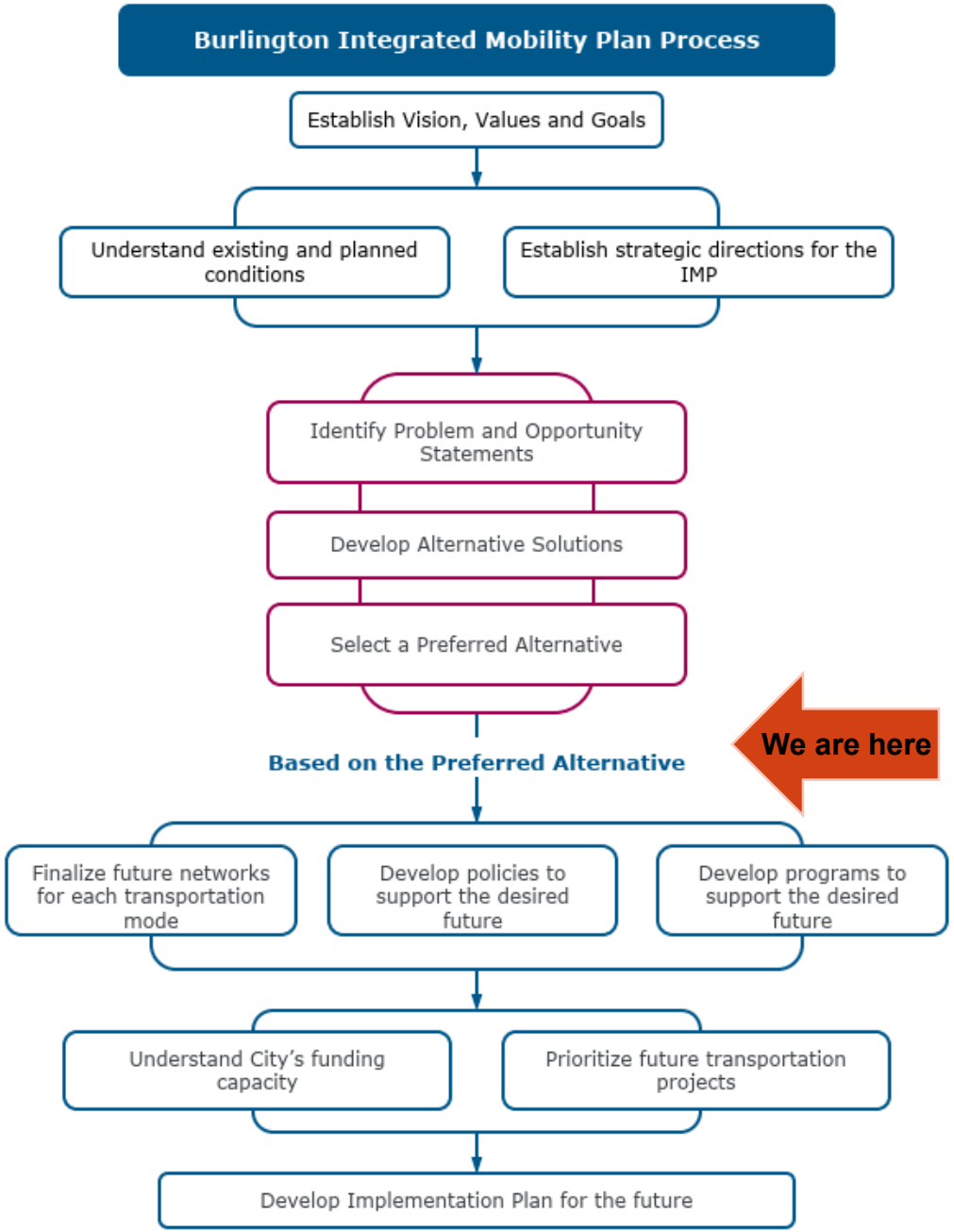

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Draft Problem Statements

Goal 1: Burlington will eliminate transportation-related deaths and serious injuries.

- *We need to design our streets to safely serve all modes of transportation, including walking, cycling and transit.*

Goal 2: Burlington's transportation system will be accessible and reliable for users regardless of factors like age, ability, income, or familiarity with the city.

- *We need to design our streets to serve the needs of travelers of all ages and abilities.*
- *We will prioritize transportation projects that improve multimodal access and connectivity for more residents.*

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Draft Problem Statements

Goal 3: Burlington will provide high-quality transportation options to move people and goods wherever and whenever.

- *We need better walking and cycling connections to transit stops and hubs.*
- *We need more safe crossings of highways, rail and creeks for people walking and cycling.*
- *We need to reduce transit travel times and improve traveler convenience to most destinations, particularly between neighbouring areas of the city.*
- *We need strong (i.e. fast and direct) transit connections to existing and future jobs.*
- *We need to improve transportation options for rural residents.*

Goal 4: Burlington will eliminate transportation-related carbon emissions.

- *We need to reduce the percentage of trips made by car.*
- *We need to tap Burlington's unrealized potential for electric vehicles.*

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Draft Problem Statements

Goal 5: Burlington's streets will support the intended roles of the communities they run through and help these communities be vibrant and prosperous.

- *We need to redesign streets in key growth areas to prioritize walking, cycling and transit.*
- *We need to update our road designs to reflect the unique priorities of different areas and current thinking on urban street design.*

Goal 6: Burlington will actively plan for the transportation changes of tomorrow while continuing to deliver great service today.

- *We need to improve the resiliency of Burlington's transportation system.*
- *We need to better prepare for the future of mobility.*
- *We need to leverage and connect capital planning to asset management.*

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Individual Mode Plans Assessments

- Strategic reviews of mode plans were completed for each mode (Transit, Cycling, Pedestrian, and Trucks)

- The strategic reviews considered each mode in isolation - “best case” for each individual mode

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Individual Mode Plan - Transit

Transit mode share to increase from **3%** to **15%** by 2051 (**12%** for local trips and **20%** for inter-municipal trips).

To accomplish this, Burlington needs:

- Identifies **direct**, **high-frequency** transit routes;
- Transit priority and Bus Rapid Transit along **strategic corridors** when supported;
- better access to transit from areas not currently serviced by Burlington Transit;
- Integration with GO Rail expansion and Dundas BRT corridor;
- Improved pedestrian and cycling connectivity to transit stops; Transportation Demand Management program;
- To continue to explore the replacement of diesel buses with low-carbon vehicles.

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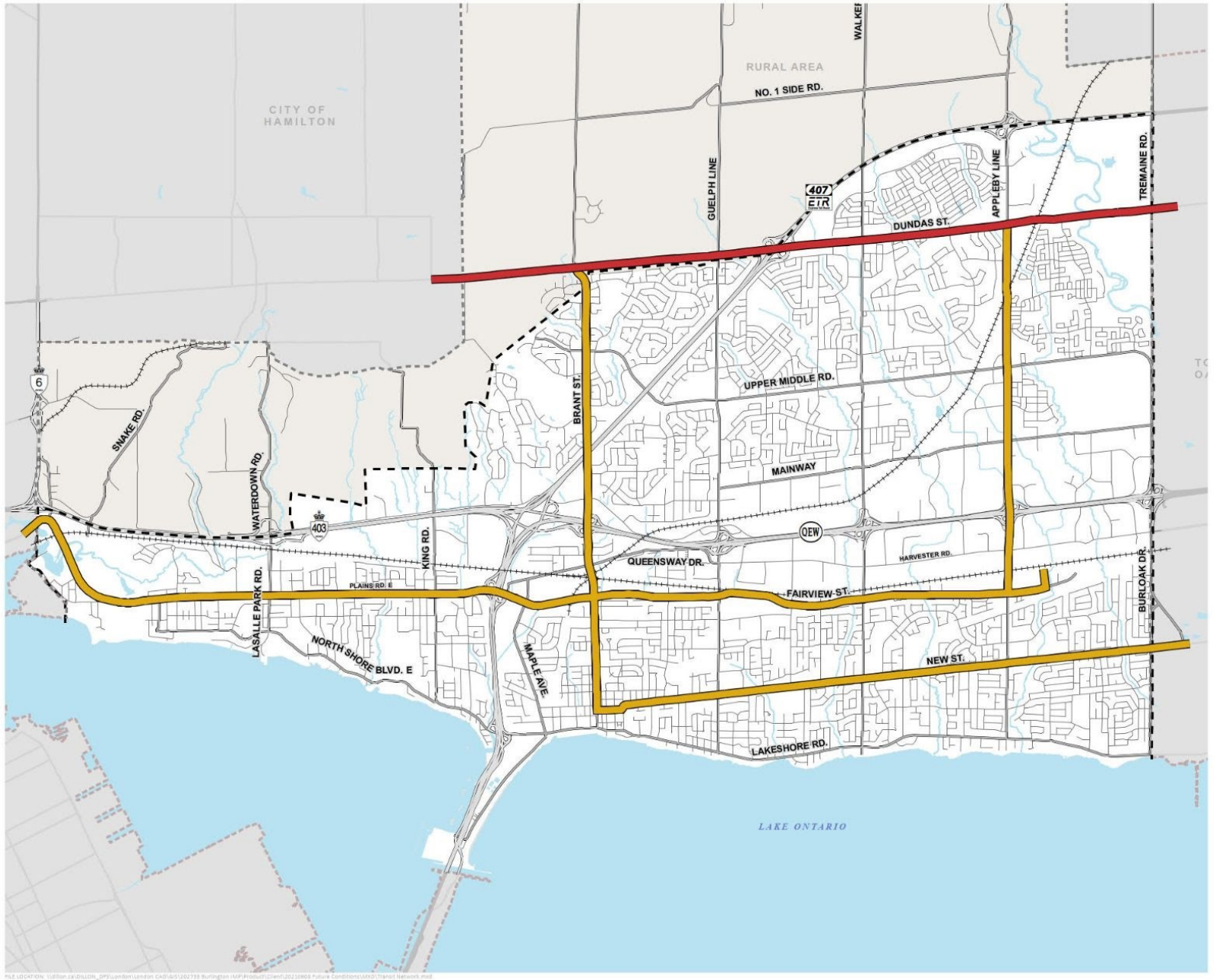

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BURLINGTON INTEGRATED MOBILITY PLAN

TRANSIT NETWORK

Bus Rapid Transit Network

- Dundas Bus Rapid Tranist
- Potential Bus Rapid Transit

Base Mapping

- Provincial Highway / Freeway
- Major Roads
- Minor Roads
- Rail Line
- City of Burlington
- Urban Boundary
- Major Creeks
- Waterbody
- Rural Area
- Municipal Boundaries

0 0.5 1 2 km

MAP DRAWING INFORMATION:
DATA PROVIDED BY CITY OF BURLINGTON 2020, MNRF 2020

MAP CREATED BY: GAM
MAP CHECKED BY: SD
MAP PROJECTION: NAD 1983 UTM Zone 17N

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STATUS: DRAFT
DATE: 2021-09-16

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Individual Mode Plan - Cycling

Cycling mode share to increase from **1%** to **6%** by 2051.

To accomplish this, Burlington needs to:

- Implement the Cycling Plan, emphasizing the **spine network**.
- Implement intersection improvements along corridors with bikeways
- a Transportation Demand Management program

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BURLINGTON INTEGRATED MOBILITY PLAN

CYCLING NETWORK

- Intersection Improvements
- Proposed Spine Network

Base Mapping

- Provincial Highway / Freeway
- Major Roads
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Individual Mode Plan - Pedestrians

Walking mode share to increase from **5%** to **9%** by 2051.

To accomplish this, Burlington needs to:

- Continue to identify and fill in gaps in the pedestrian network;
- Invest in high-quality pedestrian facilities in high activity areas, specifically the MTSA and Downtown
- Prioritize improving pedestrian connectivity to transit stops;
- Create, implement and manage a Transportation Demand Management program to continuously support the needed shifts in mode share

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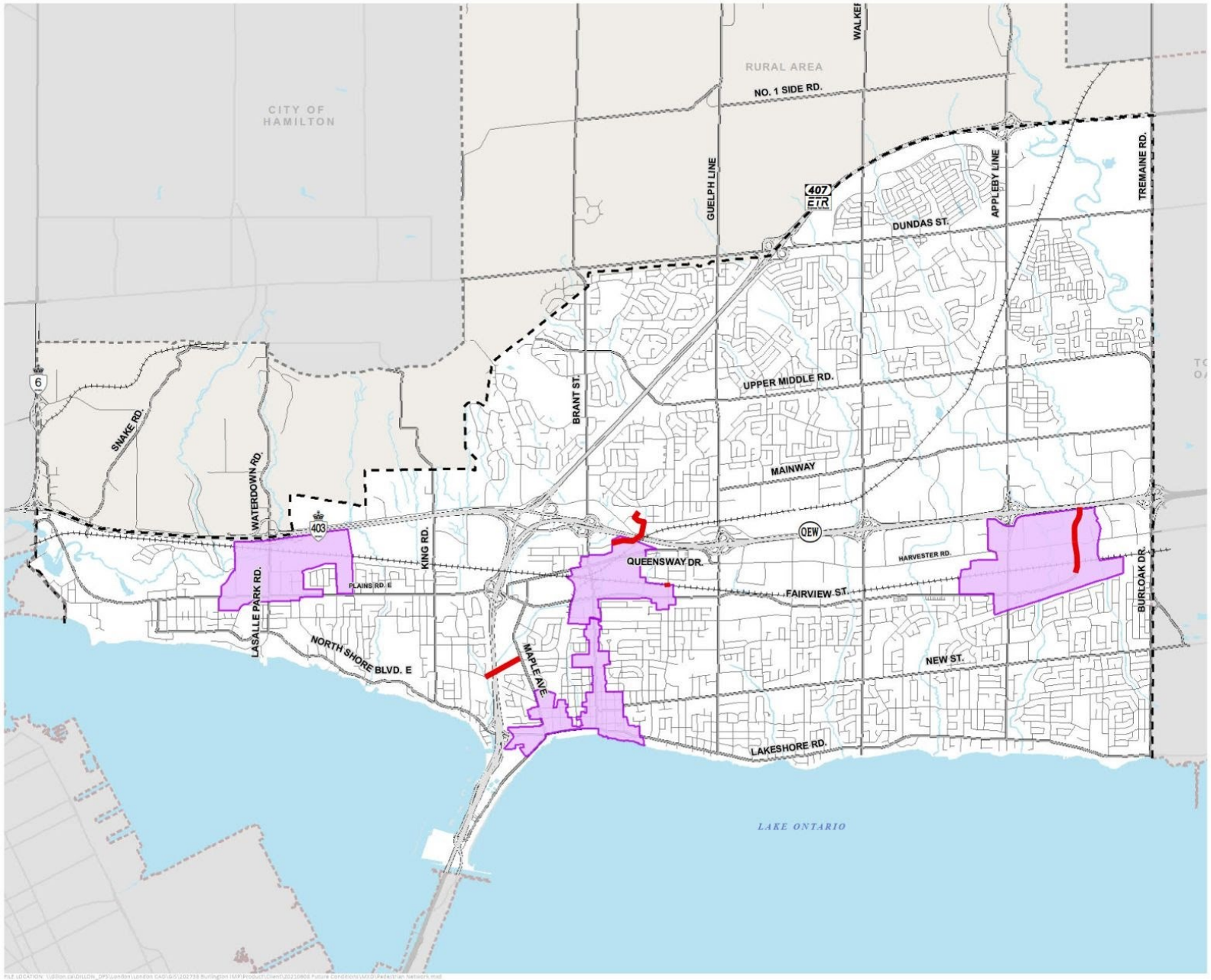

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BURLINGTON INTEGRATED MOBILITY PLAN

PEDESTRIAN NETWORK

- Approved Barrier Crossings
- Intensification Areas

Base Mapping

- Provincial Highway / Freeway
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Individual Mode Plan - Trucks

Key findings from recommendations from the Truck Mode Plan recommend that the City of Burlington:

- Physically separate vulnerable users from trucks in corridors with high truck volumes
- Prepare a Goods Movement Strategy following the IMP
- Prepare a Complete Streets Design Guideline following the IMP and emphasize the needs of trucks on key freight corridors

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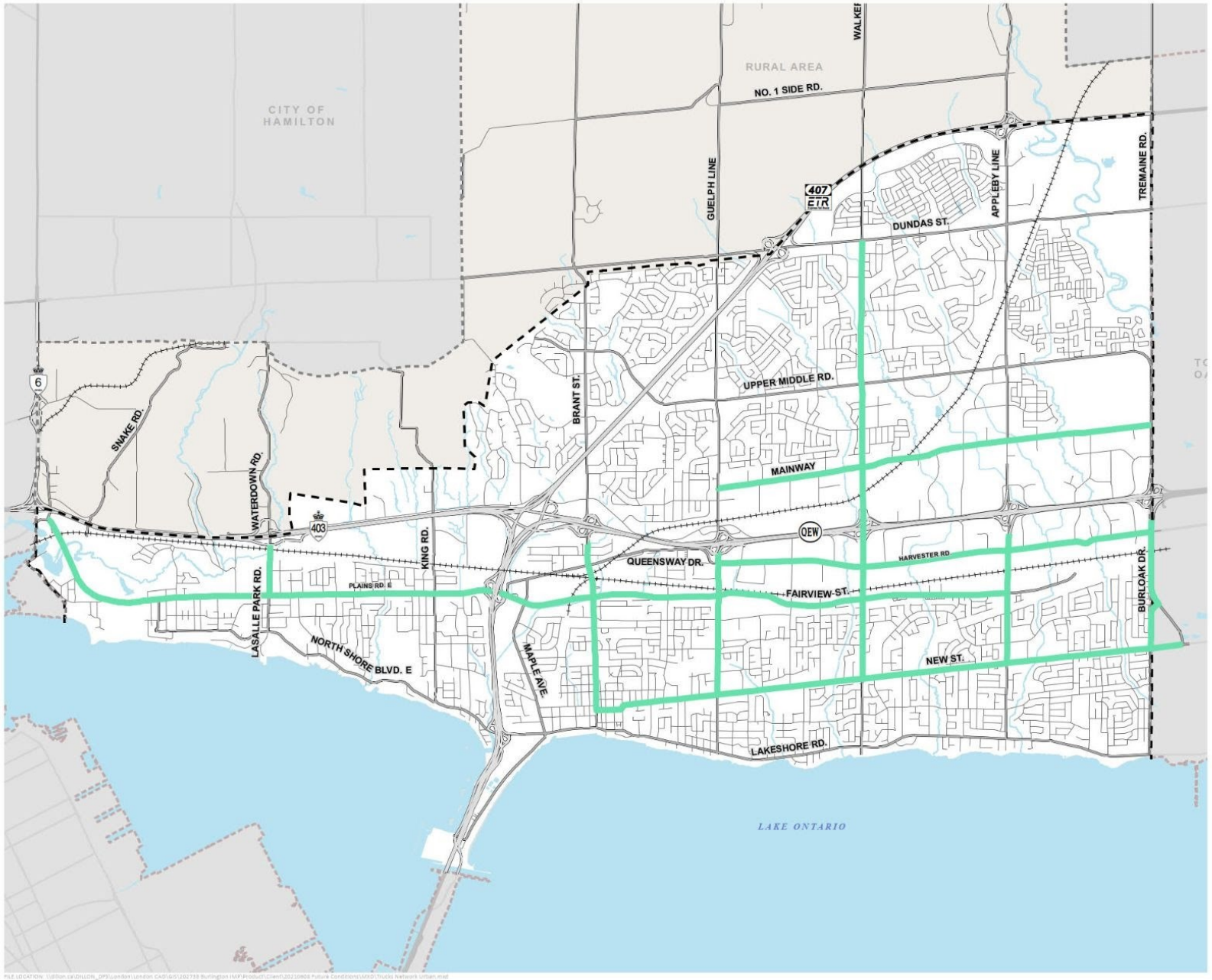

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BURLINGTON INTEGRATED MOBILITY PLAN

TRUCK NETWORK

Municipal Road Connector to Regional and Provincial Freight Network

Base Mapping

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Individual Mode Plan - Cars

Staff noted five corridors where operational concerns were known for review

1. Harvester Road (Guelph to Appleby)
2. South Service Road extension
3. Cumberland Avenue extension
   - Harvester to Pioneer Road (north)
   - Harvester to Fairview Street (south)
4. Maple Avenue (Lakeshore to Fairview)
5. New North-South connection between Fairview and Harvester

Each corridor will need further study

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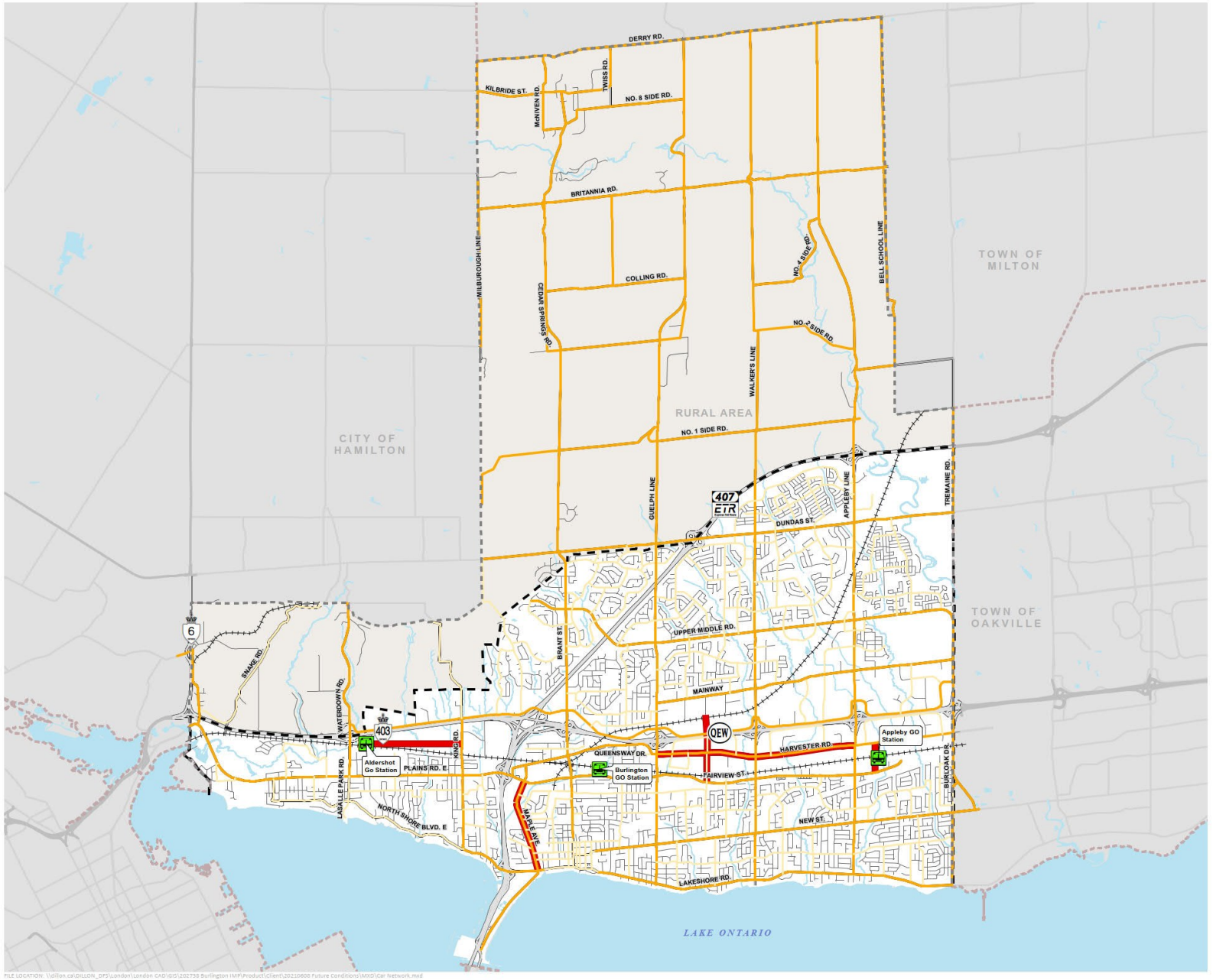

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BURLINGTON INTEGRATED MOBILITY PLAN

CAR NETWORK

- Major Transit Station
- Arterial Roads
- Collector Roads
- Future Study Corridors

Base Mapping

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Preferred Sustainable Solution

What are the parameters framing the Preferred Solution?

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Preferred Sustainable Solution

Key Attributes/ Characteristics of Sustainable and Integrated network:

- Do not widen streets to increase car capacity
- Modify a select number of existing streets to resolve operational issues
- Extend new multimodal corridors into growth areas of the City were needed
- Develop a Frequent Transit network

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Preferred Sustainable Solution

Key Attributes/ Characteristics of Sustainable and Integrated network:

- Consider widening streets or converting existing general traffic lanes to provide key dedicated transit corridors
- Develop a spine network of high quality cycling links designed to serve cyclists of all ages and abilities
- Improve the pedestrian environment in intensification areas
- Create new walking and cycling connections across barriers

Integration of Networks

- All networks need to be integrated, as they occupy the same corridors and compete for space
- Tested impact of implementing BRT network on auto capacity
  - Want to avoid potential for gridlock
- Tested availability of ROW/ property to implement cycling projects
  - Without reducing existing vehicle lanes

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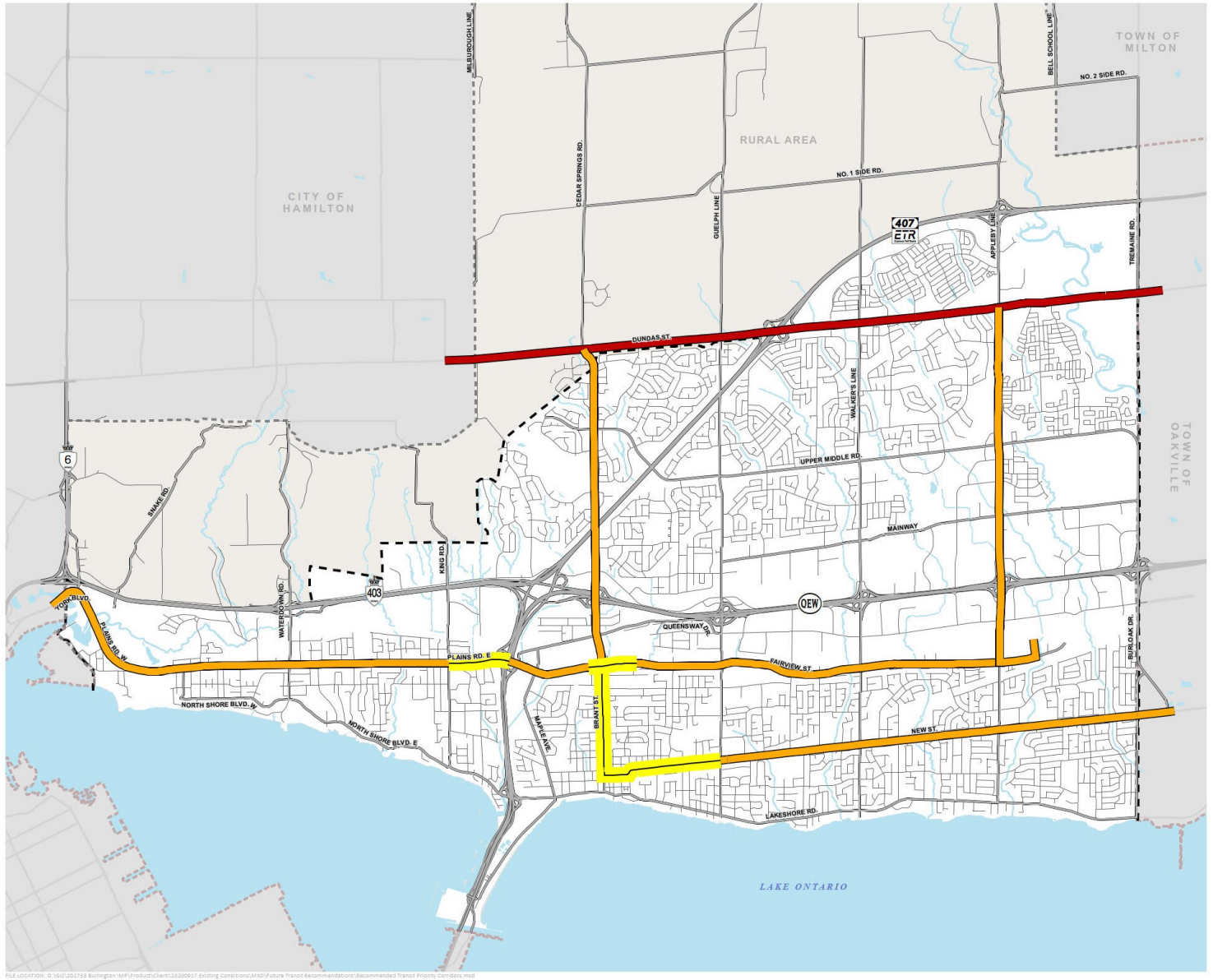
2031 Balanced BRT network

- Road Widening on BRT network (COMMITTED) for BRT lanes only
- Lane conversions for remainder of BRT network where > 4 lanes **AND where there is available capacity (auto V/C <1.2)**
- No road widening for vehicles other than committed projects
- **Sustainable mode shares to demonstrate the impact of the potential shift from current trends, even with the vehicle lane conversion**



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BURLINGTON INTEGRATED MOBILITY PLAN

TRANSIT NETWORK

- Dundas Bus Rapid Tranist
- Dedicated Lanes
- Optimized Performance

Base Mapping

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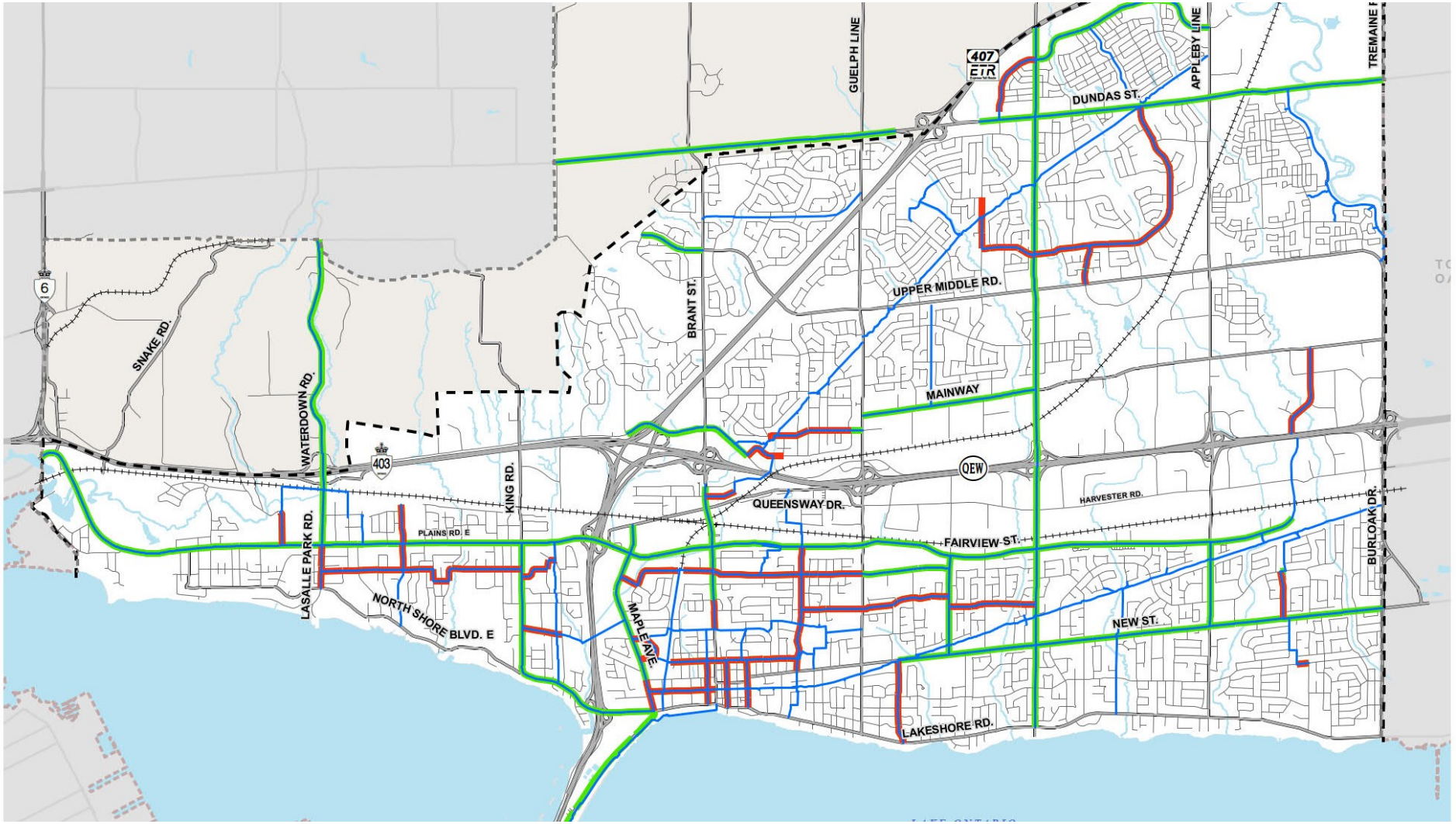
Right of Way Analysis – Deemed Width



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BURLINGTON INTEGRATED MOBILITY PLAN

DEEMED ROAD WIDTH

- Proposed Spine Network
- ROW fits Deemed Width
- Roads Needing Corridor Review

Base Mapping

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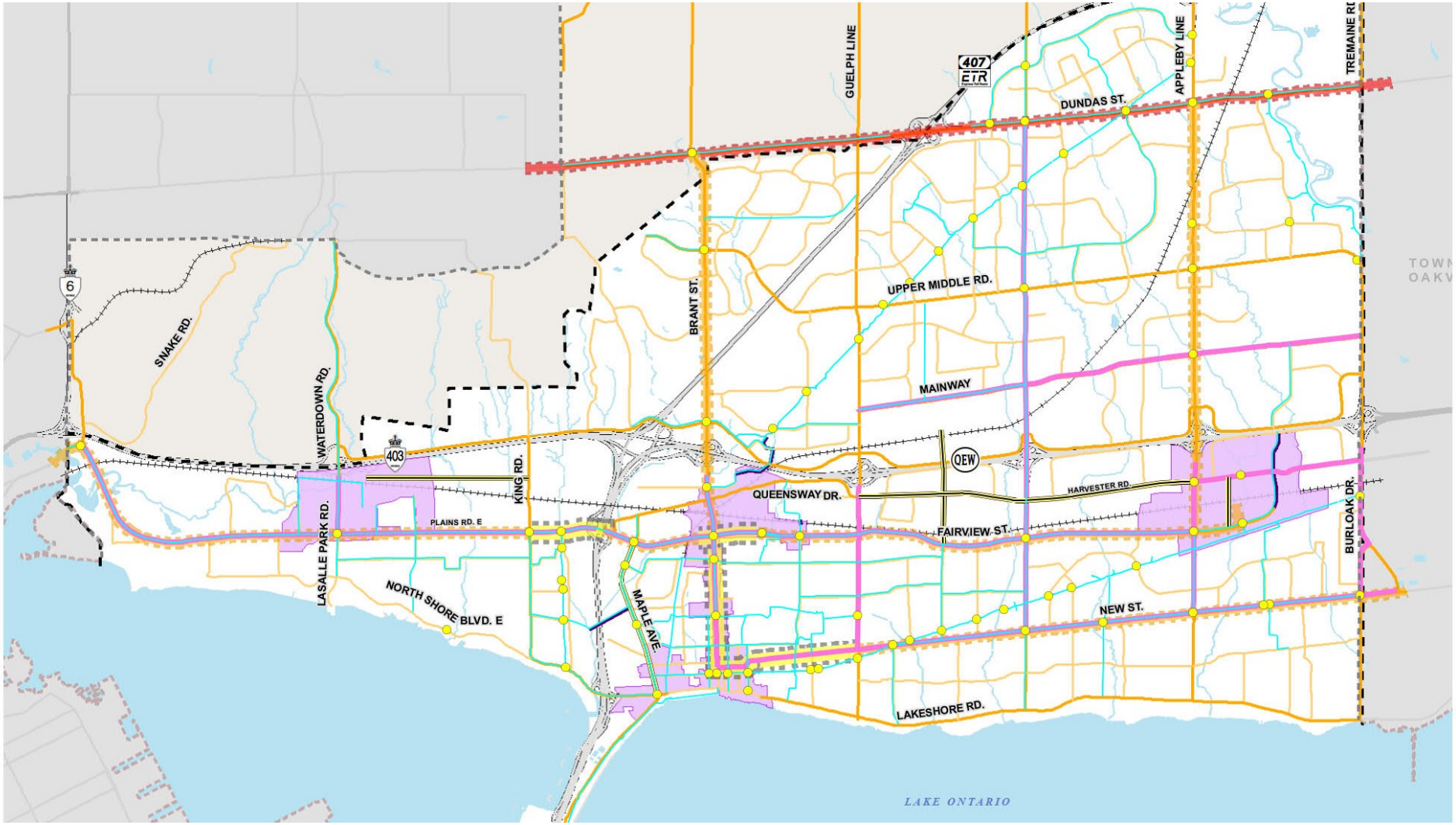
Integrated Network



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BURLINGTON INTEGRATED MOBILITY PLAN

COMBINED NETWORK

Pedestrian Network
- Approved Barrier Crossings
- Intensification Areas

Cycling Network
- Intersection Improvements
- Proposed Spine Network

Car Network
- Arterial Roads
- Collector Roads
- Future Study Corridor

Truck Network
- Municipal Road Connector to Regional and Provincial Freight Network

Bus Rapid Transit Network
- Dundas Bus Rapid Tranist
- Dedicated Lanes
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Note: Local Roads Removed For Visual Purposes

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Discussion

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