



Region of Waterloo

The ION Story



November 2015



Region of Waterloo

Planning For The Future

The Region of Waterloo has been planning for rapid transit for more than a decade

- **ION will:**
 - Limit urban sprawl; ease traffic congestion
 - Protect environmentally-sensitive areas
 - Preserve farmland; rural/urban lifestyle
 - Move people; create transportation choice
- **Without ION, the Region requires**
 - 500 new lane kilometres of roadways
 - Cost = \$1.4 billion
 - ION reduces the need for new roads by 40 per cent or \$500 million





Region of Waterloo

What Are We Building?

ION Stage 1

- **LRT:** Conestoga Mall transit terminal to Fairview Park Mall transit terminal
 - Launch in 2017
 - 19 km route, 16 stops
- **BRT:** Ainslie Street transit terminal to Fairview Park Mall transit terminal
 - Started September 2017
 - 17 km route, 7 stops

ION Stage 2

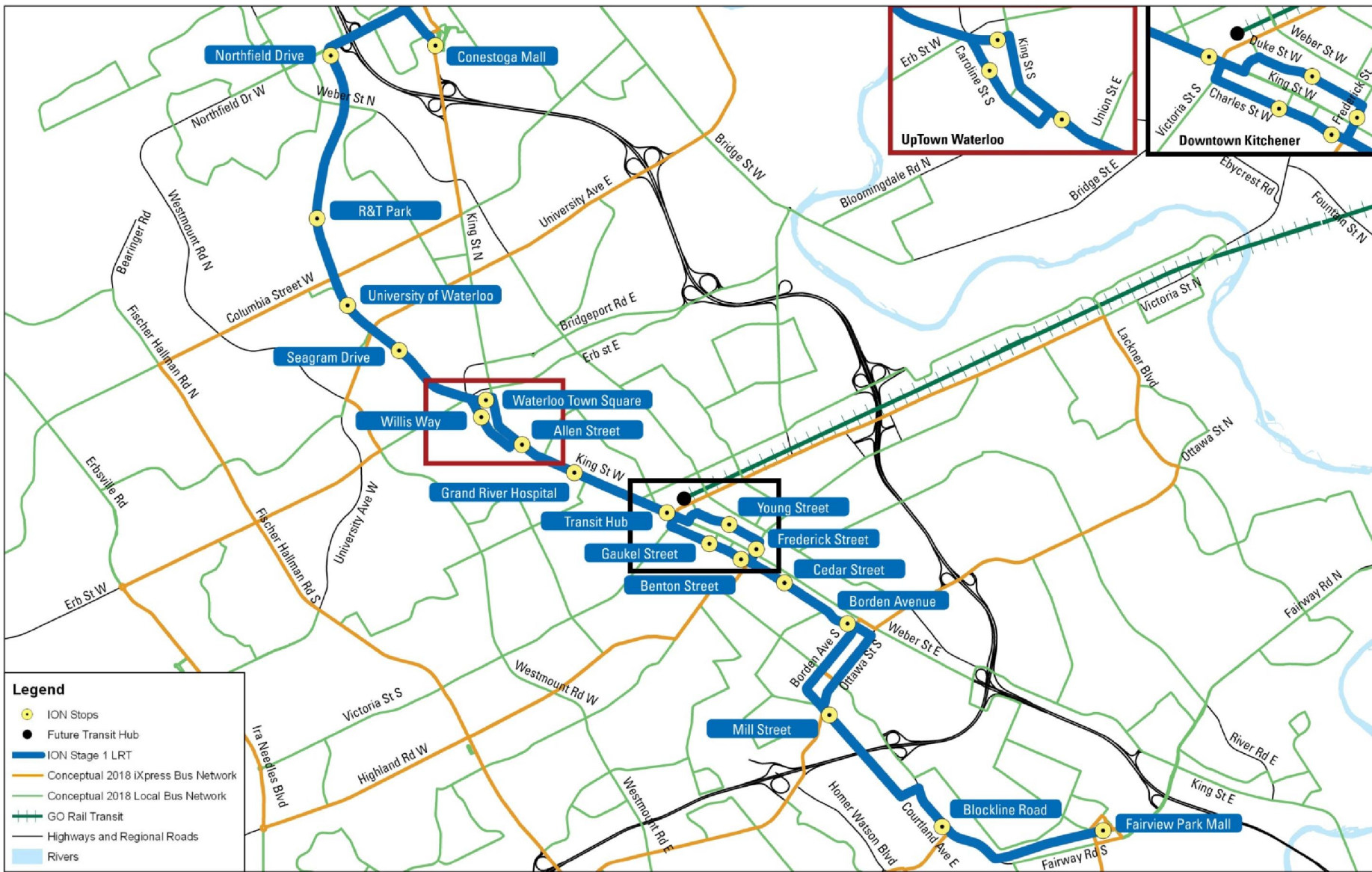
- Public engagement starts this month
- BRT converted to LRT
- Conestoga Mall transit terminal to Ainslie Street transit terminal
 - 37km route, 23 stops





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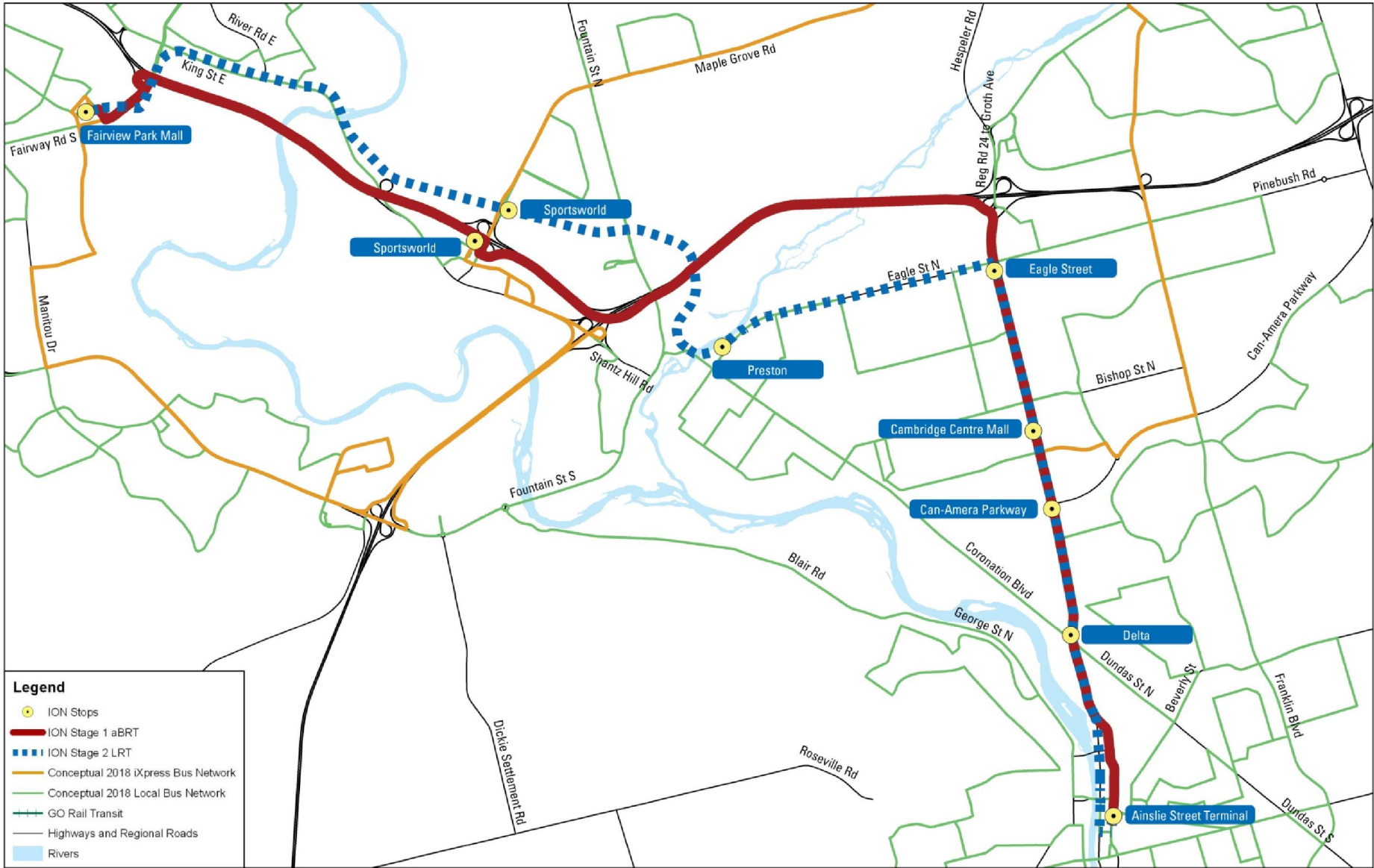
Stage 1 LRT





Stage 1 aBRT/Stage 2 LRT

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Region of Waterloo

Grand River Transit Integration



- **GRT network redesign**
 - Seamless, efficient and easy-to-use transit system
- **Common fare payment system**
- **Expanded iXpress service**
 - Victoria/Highland
 - Ottawa, Maple Grove
- Phased-in aBRT service
- ION-branded buses in 2017



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Master Transportation Plan

- **Community Building Strategy:** Framework for development along the Central Transit Corridor
- **King/Victoria Transit Hub:** With connections to ION, GRT, GO Transit and VIA rail
- **Roads:** The Region has committed \$860 million over the next 10 years for expansions and improvements
- **Trails:** ION stops are located within close proximity to the region's vast network of multi-use trails





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ION aBRT Operations

- Frequent, reliable and convenient service
- Operates in mixed traffic
- **Bus bypass shoulders**
- **Signal priority**
- **Queue jumping at intersections**
- Limited stop service
- Stops similar to LRT stops





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ION Light Rail Transit Vehicles



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ION LRT Vehicles

- Region purchased 14 LRVs from Bombardier
- **Stops designed for two LRVs**
- One vehicle includes:
 - 5 articulated sections
 - 2 cab, 3 coach
- **100% low-floor - First in North America**
- Extra-wide interior
 - 57 seats and plenty of standing room
- **Capacity: 200 passengers/LRV**





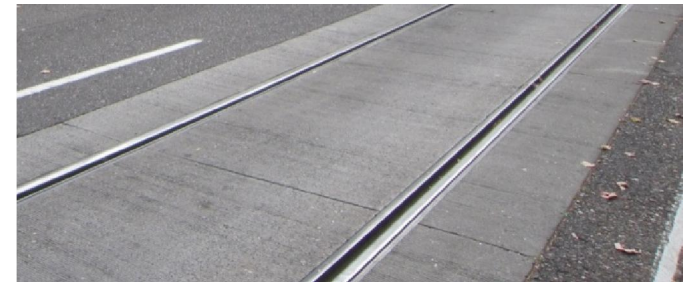
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ION LRT Operations

- ION runs in its own rapidway
- **Proof of payment system**
- **Frequency**
 - Every 8 minutes (during rush hour)
 - Every 10-15 minutes (rest of the day)
- Predictive transit signal priority
- **Signals pre-empted by emergency vehicles**



Ballasted track



Embedded track





Region of Waterloo

ION LRT Stops



Waterloo Park

Grand River Hospital



Public Private Partnership

- **Plenary: one of Canada's largest Public-Private Partnership developers**

- Gold Coast Rapid Transit, Australia (DBFOM), \$1.07 billion



- **Meridiam: major international infrastructure investor**

- Montpellier High Speed Rail, France (DBFM), \$2.32 billion



- **Aecon: Canada's largest publically-traded construction company**

- Highway 407 ETR, Toronto (DBFOM), \$2.5 billion



- **Kiewit: one of North America's largest construction and engineering firms**

- Mid-town Tunnel, New York (DBFOM), \$2.9 billion



- **Keolis: world leader in public transit operations**

- Gold Coast Rapid Transit, Australia (DBFOM), \$1.07 billion





Region of Waterloo

Roles and Responsibilities

- **Region will:**
 - Own the LRT infrastructure and vehicles
 - Establish schedule and collect fares
 - Monitor system performance
 - Provide integrated customer service

- **GrandLinq will:**
 - Design and construct the LRT system
 - Operate ION – to the Region's plan
 - Maintain the ION LRT vehicles and system
 - Provide short and long-term financing





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How ION is built

- 1. Temporary work (clearing and grubbing)**
 - **Impact:** rolling lane closures or restrictions
- 2. Utilities construction (water, sanitary, etc.)**
 - **Impact:** full road closures
- 3. LRT trackway and trackway structures built**
 - **Impact:** rolling lane closures or restrictions as well as short-term intersection closures
- 4. ION stops are built**
 - **Impact:** rolling lane closures or restrictions as well as short-term intersection closures
- 5. Electrical wires to power the train placed**
 - **Impact:** rolling lane closures or restrictions as well as short-term intersection closures
- 6. Vehicle testing**



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ION Construction – Waterloo

- Conestoga Mall, King to Northfield
- Northfield, King to CN railway
 - Highway 85 Bridges
- CN railway, Northfield to UpTown
 - Crossings – i.e. University
 - University of Waterloo
 - Waterloo Park
- Erb, Caroline to King
 - Erb/Caroline intersection
- Caroline, Erb to Allen
- Allen, Caroline to King
- King, William to Union
- OMSF – 518 Dutton Drive





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ION Construction – Waterloo



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ION Construction – Kitchener

- **King, Union to Victoria**
 - **Grand River Hospital**
- **King Street Grade Separation**
- **Benton, Charles to Duke**
- **Duke, Frederick to Francis**
- **Francis, Duke to King**
- **King, Francis to Victoria**
- **Charles, Victoria to Borden**
- **Borden, Charles to CN railway**
- **CN railway, Borden to Hayward**
- **Ottawa, CN railway to Charles**
- **Hayward, CN railway to Courtland**
- **Courtland, Hayward to Hydro corridor**
- **Hydro corridor, Courtland to Wilson**
- **Fairview Park Mall and Wilson**



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ION Construction – Kitchener

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Working with the community

- Communication – notices, updates
- Understand business needs
- Signage – detour, way-finding for customers and visitors
- Partnerships – Cities, BIAs, IABC Waterloo



UpTown iON WATERLOO

TAKE THE #IONUPTOWN CHALLENGE!

Win one of five prizes of 100 UpTown Dollars!

DO YOU LIVE WORK LEARN PLAY SHOP UPTOWN? SHOW US! AND BRING ION WITH YOU.

From November 17 to December 18, take a photo with an ION branded item at any UpTown Waterloo business where you live, work, learn, play or shop, and you could win one of five prizes of \$100 UpTown dollars!

For full contest rules and regulations, visit www.uptownwaterloo.com/con

facebook.com/uptown_waterloo @UpTownWaterloo

DURING ION CONSTRUCTION, WE SAVED YOU A SPOT
Use the following entrances at all times during construction to park and access your favourite UpTown Waterloo business

Questions about construction?
connect@rideion.ca @rideION 1-844-625-1010 facebook.com/rideion

Parking Legend
Municipal Parking Lot Private Parking Lot Parking lot entrances and exits open during construction on Caroline ION Construction





Business/Resident Concerns

Region of Waterloo

- **Physical: noise, dust, vibration**
- **Emotional: fear, change, stress**
- **Business loss**
- **Communication, social media**
- **OPEN and accessible**



Get your hands on this limited edition ION USB KEY!



- 1 Visit a business along the ION corridor
- 2 Tweet your receipt using the #tweetyourreceipt hashtag
- 3 Watch our Twitter feed to see if you're a weekly winner!

Follow us on Twitter @rideIONrt and continue to support #IONbiz



Lauren MacNabb @SaysLauren - Sep 15
Lots going on down this way! #TweetYourReceipt #IONbiz



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Questions



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