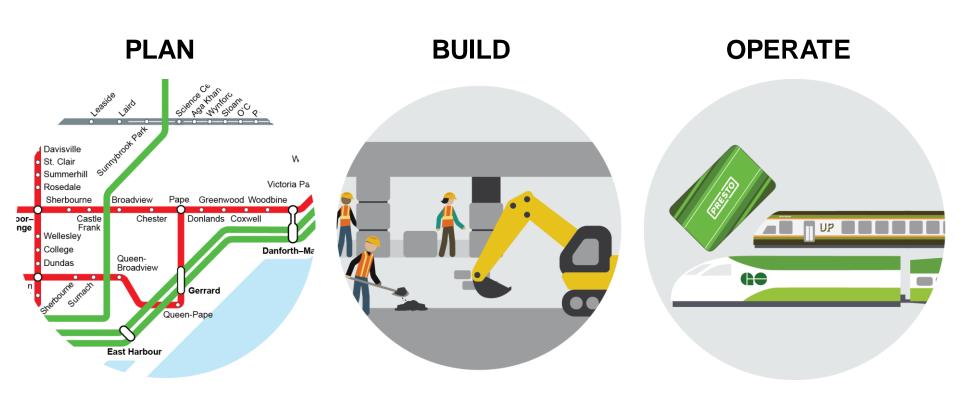


# GRIDLOCK COSTS OUR ECONONY

# KITCHENER - WATERLOO



## **METROLINX**







# OVER \$30B IN INVESTMENT IN THE GTHA'S RAPID TRANSIT NETWORK



EXPANDING GO TRAIN SERVICE

- More service on all lines
- Electric trains, every 15 minutes or better in both directions, for most GO customers
- 23 more stations and line extensions to serve new markets



74 KM OF NEW LIGHT RAIL TRANSIT

Under construction:

Eglinton Crosstown

In procurement:

- Finch West
- Hurontario
- Hamilton B-Line

In design / planning:

Sheppard East



68 KM OF NEW BUS RAPID TRANSIT

Partially in-service, with remainder under construction:

- Viva in York Region
- Mississauga Transitway

In design / planning:

Hamilton A-Line





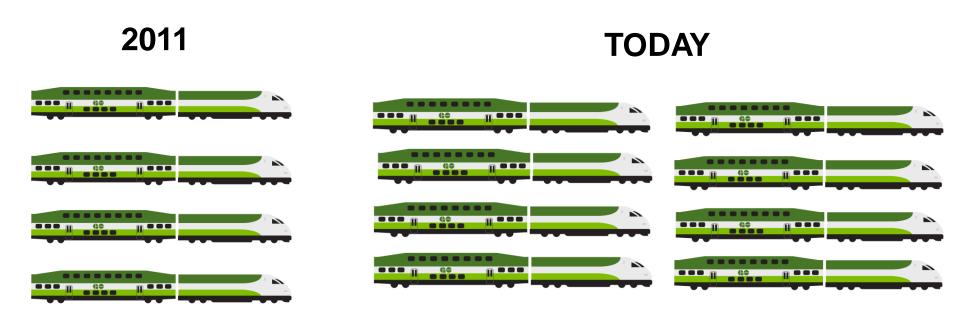
CONNECTING IT ALL TOGETHER

- Expanding and revitalizing Union Station, the heart of the regional network
- PRESTO now in use across the region



### **GO RAIL SERVICE**

### Kitchener GO Train service has doubled





## **GO BUS SERVICE**



**2016:** Three new bus routes including express service from Kitchener with timed connections to and from trains at Bramalea GO station to provide all-day two-way service Monday to Friday.

### **KITCHENER CORRIDOR INVESTMENTS**

- Launch of Kitchener
  GO bus service
- \$160M investment to purchase 26km of track between Toronto and Bramalea

Launch of Kitchener GO train service

2009 2010 2011 2014

\$1.2B investment in Kitchener Corridor \$76M investment to purchase52km of track betweenGeorgetown and Kitchener



### KITCHENER CORRIDOR INVESTMENTS

- Train service doubled
- New all-day bus/train service
- \$16M Shirley Avenue train/bus facility
- MTO bus by-pass shoulders on Hwy 401
- 3<sup>rd</sup> track in Georgetown built to improve service efficiency

RFP issued to design, build and finance HWY 401 rail tunnel

4<sup>th</sup> track construction Union to Bramalea

2015

2016

2017

Kitchener Corridor improvements complete

- Agreement in principle for new rail corridor
- \$43M MTO investment in the Kitchener Transit Hub

**\$752M** Federal investment in corridor upgrades



# WHAT IT TAKES TO BUILD HEAVY RAIL SERVICE KITCHENER CORRIDOR IMPROVEMENTS – 2010 to 2015



- Expanded corridor from a single track to 3 tracks with room to add a 4<sup>th</sup>
- 16 bridges widened or replaced
- 7 underpasses/overpasses to remove at-grade crossings
- 1 rail-to-rail separation at the busiest intersection in Canada to remove a major bottleneck in the corridor
- 60 kilometres of new track
- Among other infrastructure feats, we poured enough concrete to build 5 CN Towers
- 1000s of overnight and weekend work hours to maintain peak service throughout construction
- Extensive community engagement

# NEW INFRASTRUCTURE REQUIRED FOR ENHANCED KITCHENER SERVICE



### New Track

- New 30km corridor between Bramalea and Milton
- 4th track between Union Station & Mount Pleasant
- 2nd 52 km track between Georgetown & Kitchener
- Upgraded signalling and communication system



### New Trains

 Electrification and new electric train fleet



# New Bridges and Tunnels

- New tunnel under Highway 401 to accommodate more track/service on the Kitchener line
- Other grade separations (bridges/tunnels)

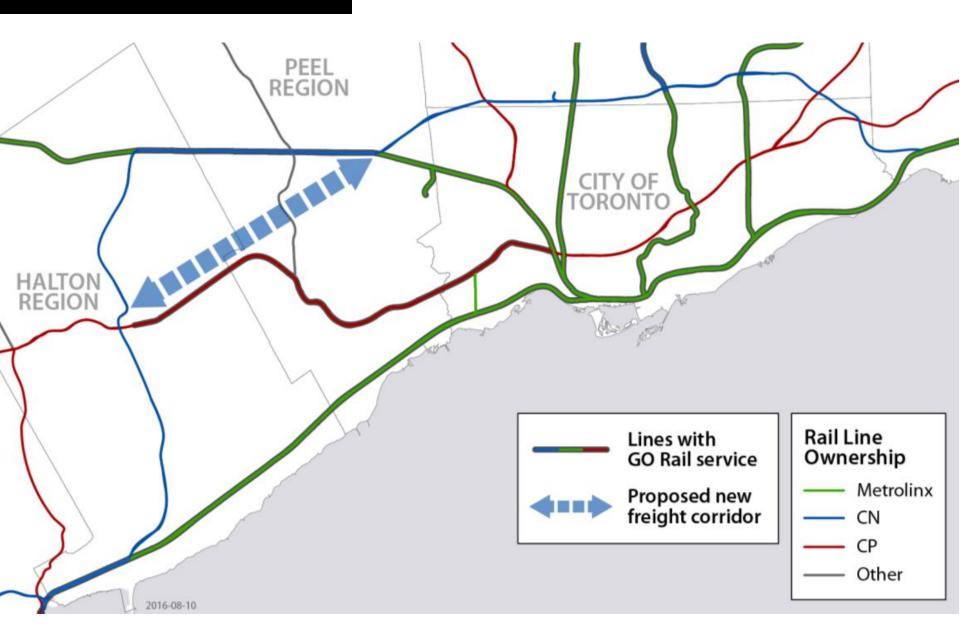


### New Renovations

 Renovations at existing GO stations



### **NEW CORRIDOR**



### REQUIREMENTS FOR THE NEW CORRIDOR

- Preliminary planning and design work is underway at the same time negotiations with CN move forward.
- Remaining work can not begin until an agreement is secured.

Phases	Durations (*some can be done in parallel)
<ul><li>Technical and feasibility studies</li><li>Planning studies</li><li>Design studies</li><li>Project Planning</li></ul>	2-3 years (approx.)
<ul><li>Community engagement</li><li>Community impact and mitigation</li><li>Environmental assessment</li><li>Permit and approvals</li></ul>	3 years (approx.)
<ul><li>Procurement</li><li>Construction</li><li>Commissioning</li></ul>	4 years (approx.)
Community impact and engagement	Ongoing

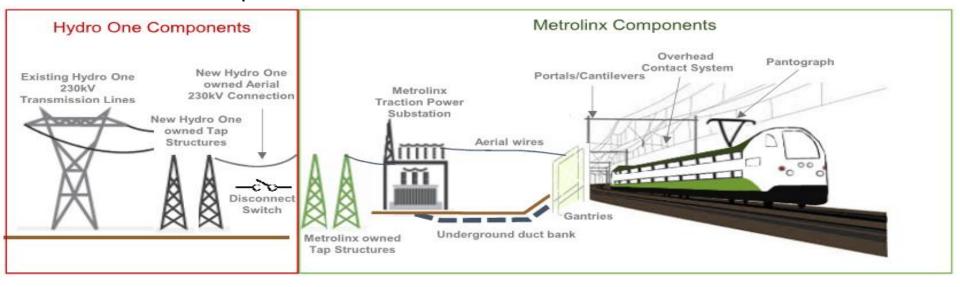
### **BUILDING A NEW CORRIDOR**

Building a new corridor is complex and as outlined in initial feasibility work will require:

- Up to 35 new bridges for road and water crossings including significant crossings of 401, 410
- Modification and/or relocation of up to 17 hydro towers and as much as
  3.4 km of major gas line relocations
- Construction of 60 km of new track (2 tracks x the 30km length) plus new train signal system
- Construction of a new rail/rail grade separation where Kitchener line will cross the bypass corridor
- Noise and vibration mitigation as required for adjacent properties
- Property impacts

### **ELECTRIFICATION**

- Metrolinx can only proceed with electrification on owned corridors.
- An environmental assessment is underway now to plan and design the required infrastructure for electric service on the Kitchener line between Bramalea and Highway 427.
  - This EA is on track to be complete by the end of this year.
- The Kitchener line west of Bramalea can be electrified only once the new train corridor is built.
  - This will require an additional EA.



### **OUR COMMITMENT TO YOU**

 We will continue to build more infrastructure as outlined in our Regional Express Rail plan

 We will continue negotiations with CN to reach a formal agreement to build a new corridor, which will enable us to deliver two-way all-day electric train service to Kitchener.





# As our region grows our transit system needs to grow too.

# Let's get moving.

### Learn more:

- Our website, metrolinx.com
- Our blog called The Link, at blog.metrolinx.com
- Social media: Facebook-Twitter-Instagram

