

Construction Hub Coordination



Ensuring Safe, Vibrant and Accessible Streets



November 25, 2019

toronto.ca/constructionhub

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Overview

- 1. Background**
- 2. Lessons Learned, Best Practices**
- 3. Applying Lessons to Toronto,
Construction Hub Coordination Pilot**

Background

Council has sustained interest in improving **work zone** coordination, especially how it impacts safety and mobility.

Following a pedestrian fatality near a construction work zone at Yonge and Erskine, the **Mayor and local Councillors promised quick action.**

Seattle had similar work zone issues and implemented a successful Construction Hub Coordination program.

Seattle's program involves **industry, businesses and community** organizations to work towards public safety.

Toronto is growing

Toronto is one of the most liveable cities in the world. Ranked 7th by The Economist.

Infrastructure improvements and developments are making our city great.

Busiest construction season ever.

\$1 billion for roads, bridges, expressways, sewers and water mains

Development Pipeline: 397,327 residential units + 11.1 million m² non-residential gross floor area (GFA)

In 2019, 237 high-rise and mid-rise buildings are under construction – up from 217 last year at this time

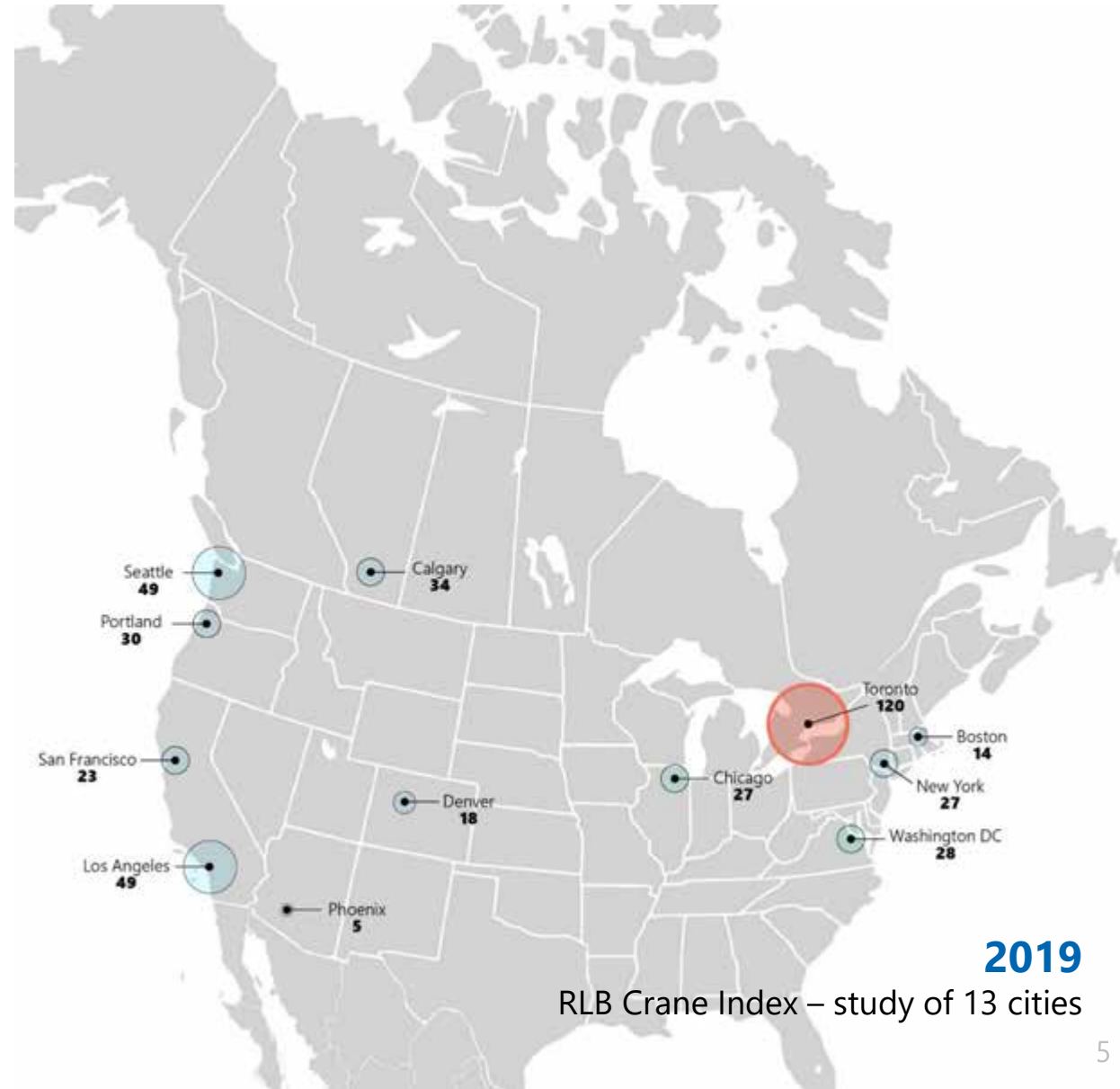


Street Revitalization



Open Space Destination

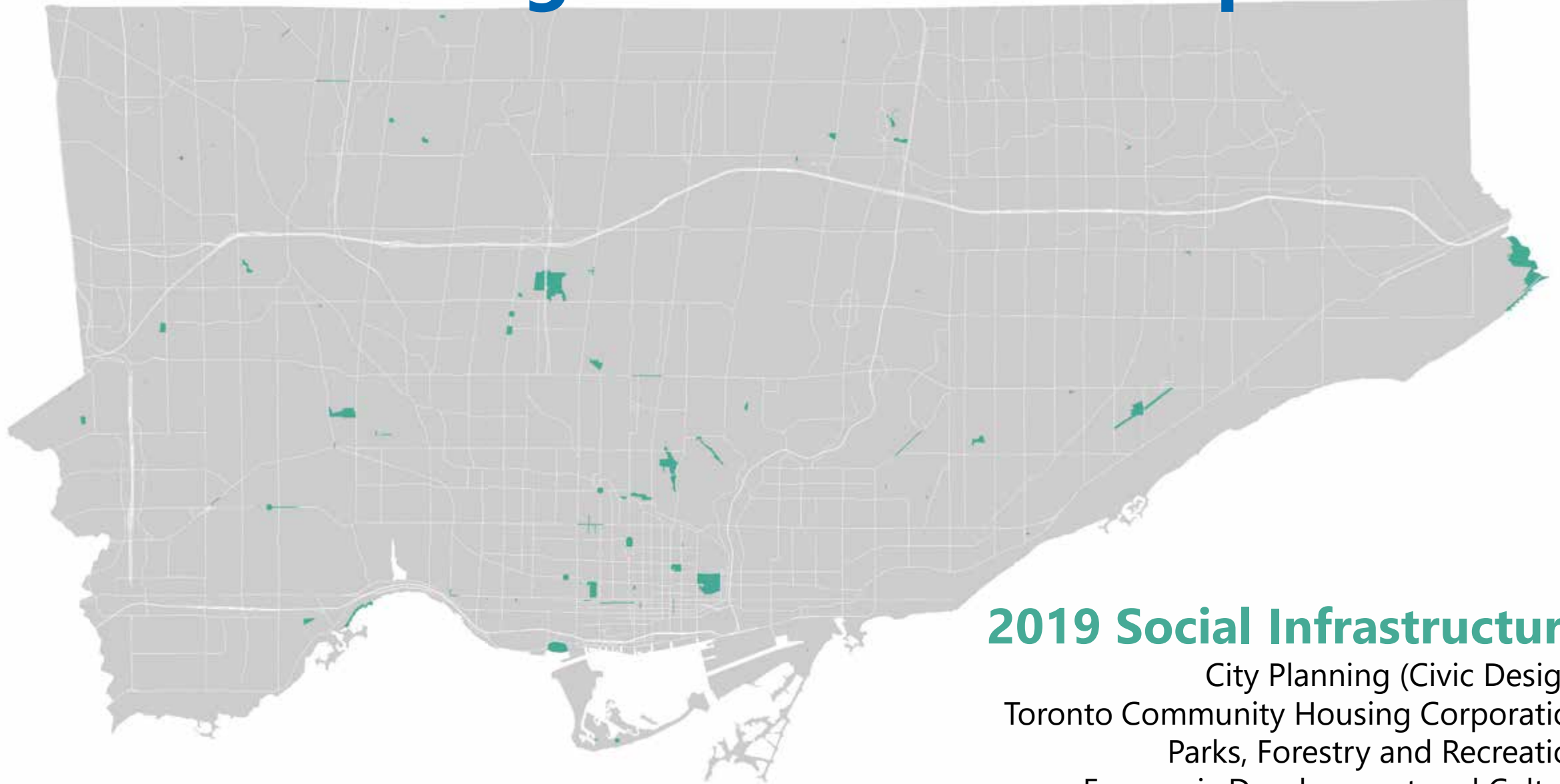
Toronto has the most cranes in N. America



2019

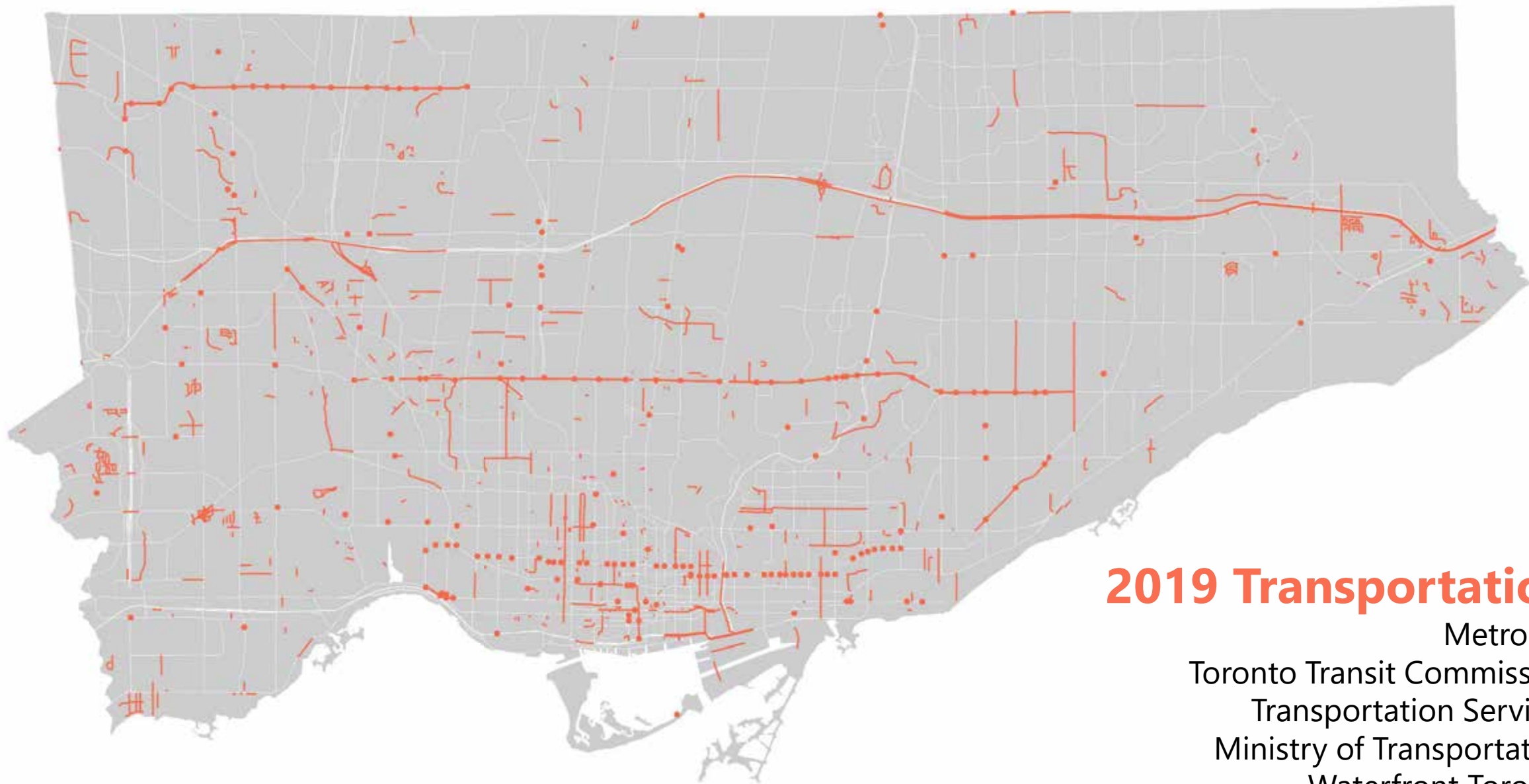
RLB Crane Index – study of 13 cities

Local trends in growth and development...



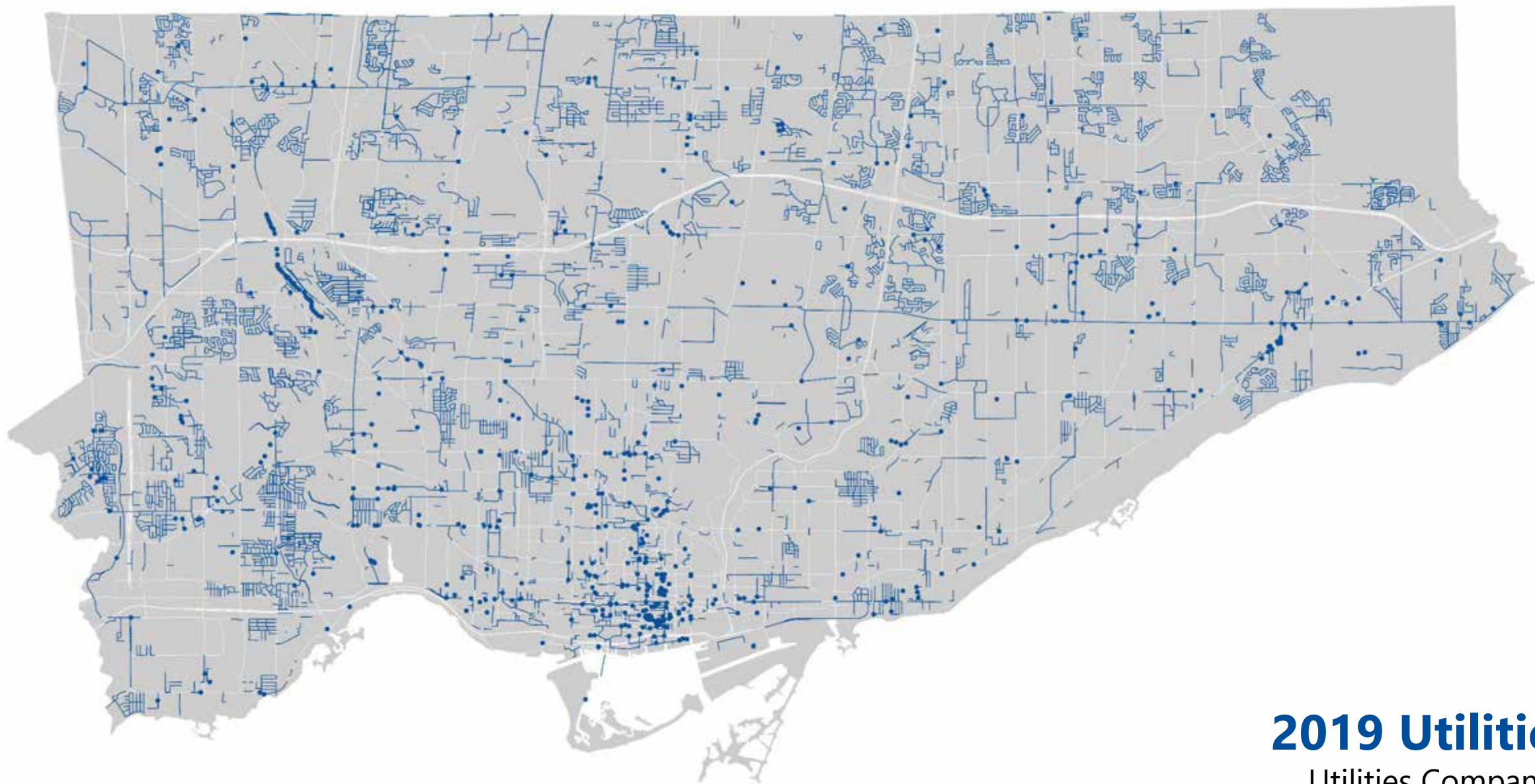
2019 Social Infrastructure

City Planning (Civic Design)
Toronto Community Housing Corporation
Parks, Forestry and Recreation
Economic Development and Culture
Infrastructure Ontario



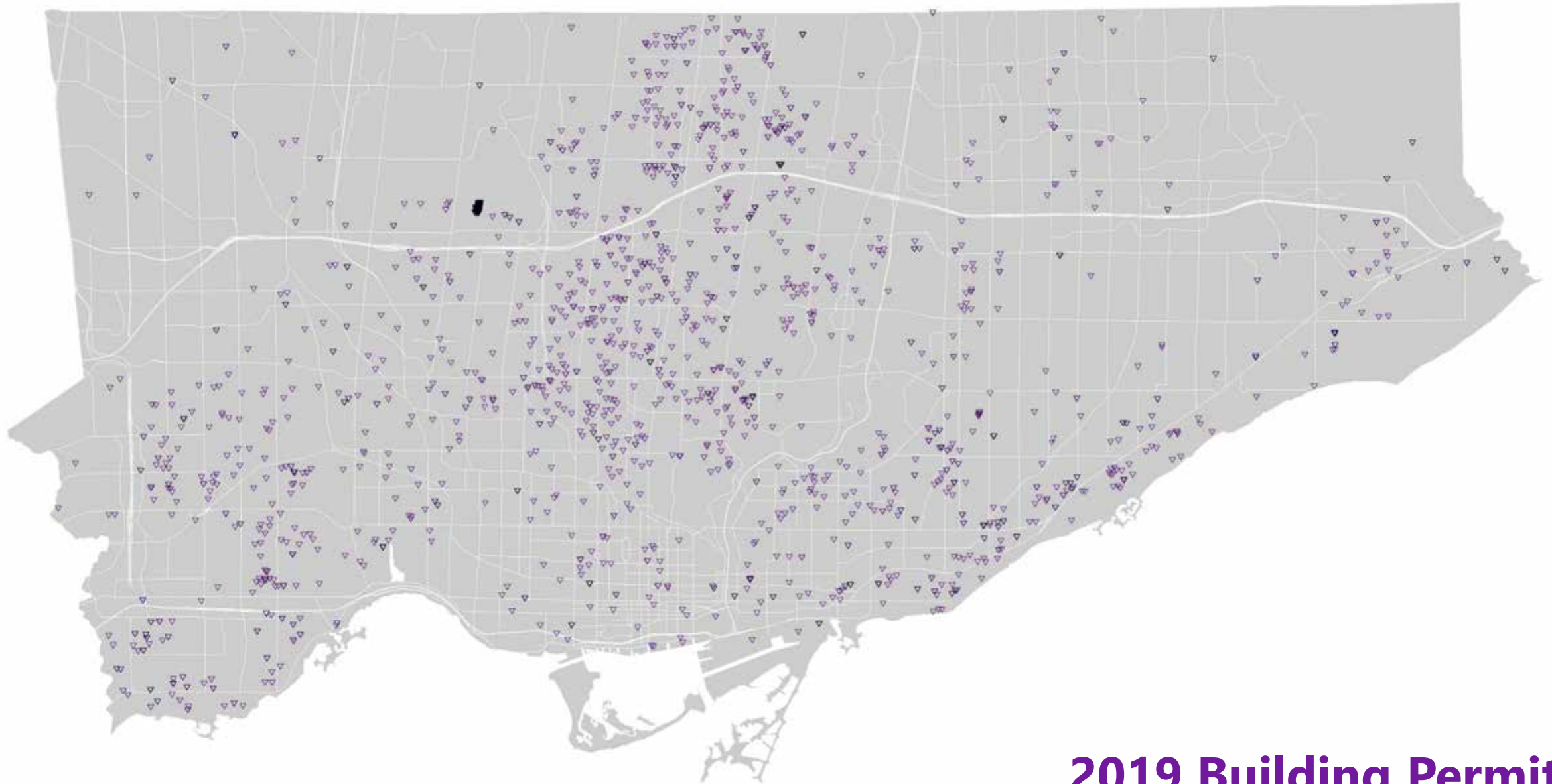
2019 Transportation

Metrolinx
Toronto Transit Commission
Transportation Services
Ministry of Transportation
Waterfront Toronto
Other Major Construction



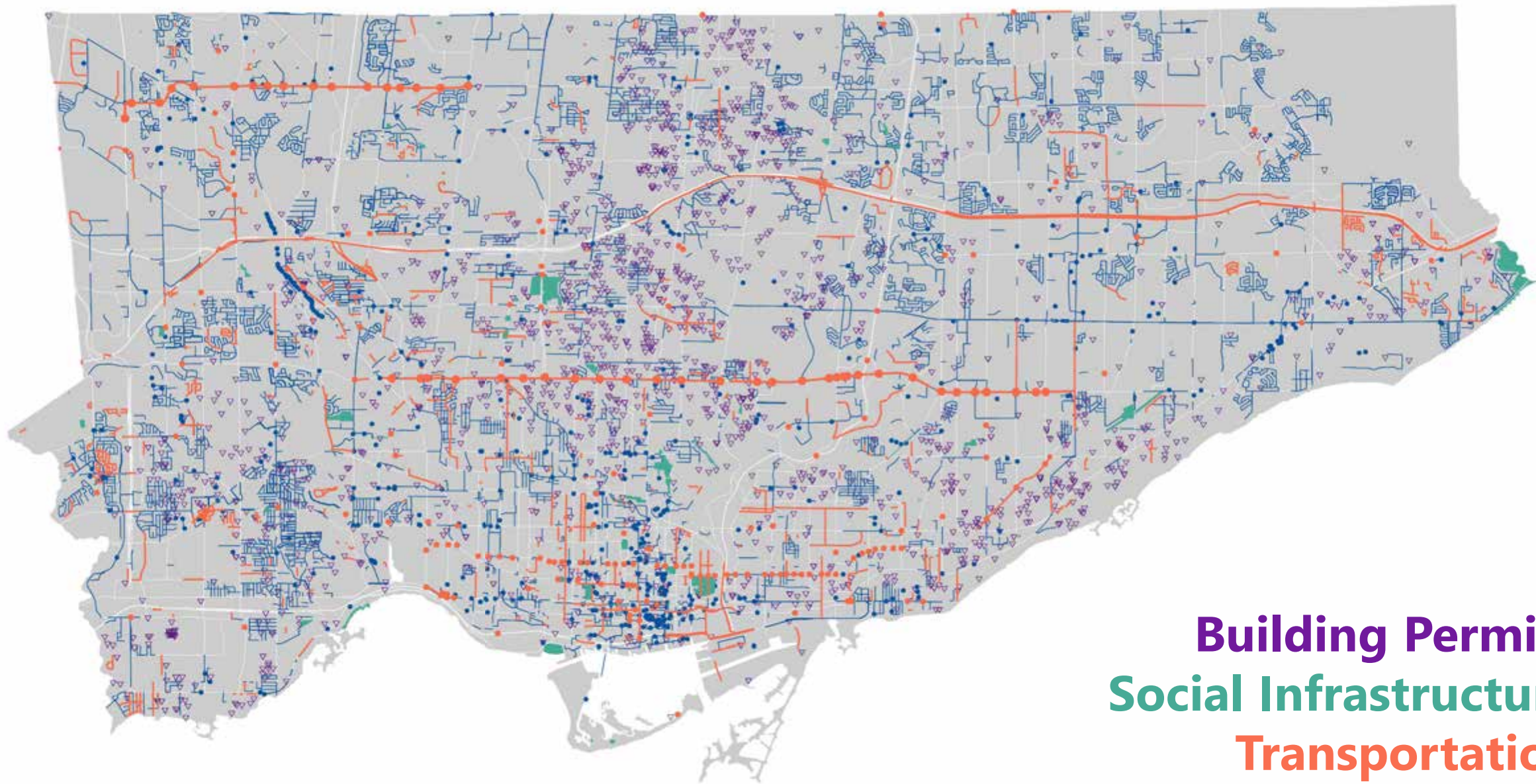
2019 Utilities

Utilities Companies
Toronto Water

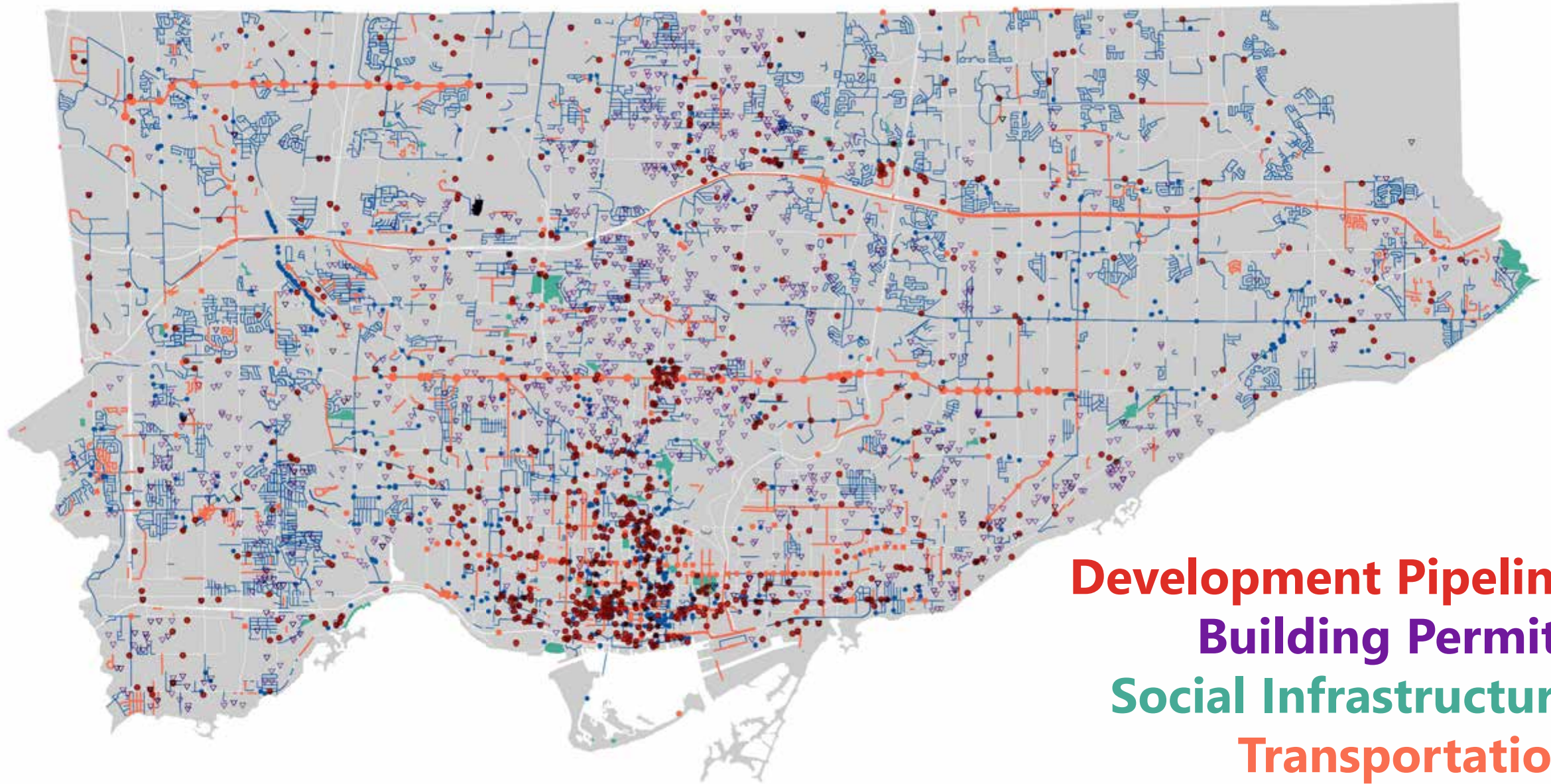


2019 Building Permits

New Houses and Buildings



Building Permits
Social Infrastructure
Transportation
Utilities



Development Pipeline
Building Permits
Social Infrastructure
Transportation
Utilities

In order to benefit from vibrancy...



...it often takes multiple years



Areas with high levels of construction have very real impacts on neighbourhoods

More urban-scaled projects in close proximity result in:

- More conflicts
- More construction vehicles
- More traffic infiltration
- Less flexibility with schedules
- Less margin of error
- Less patience



Truck Congestion

Businesses and residents live with construction pain



Construction Impacts People Differently

Agency Partners

"How can we better coordinate to stay on schedule & keep the public safe?"

- City Divisions
- TTC
- Metrolinx
- MTO
- MOL
- TCHC
- Waterfront Toronto
- TRCA
- ...

Utility Partners

"How will this impact our costs & timelines?"

- Toronto Hydro
- Enbridge
- Enwave
- Telecoms
- ...

Industry Partners

- RESCON
- BILD
- Trucking industry
- Sewer & Watermain Constructors
- RMCAO
- Crane Rental Association
- ...

Businesses

"How will people access my business? Will this impact my bottom line?"

- BIAs
- Building Managers & Owners
- Delivery Providers
- ...

Travelling Public

"How will I get to my destination safely & on time?"

- Vulnerable Users
- Pedestrians
- Cyclist
- Transit User
- Driver
- Walk Toronto/ Cycle Toronto
- ...

Community

"How will this impact my property & my area?"

- Resident Groups
- Ratepayers/ Tenant Associations
- Condo Boards
- School Boards
- Hospitals
- Seniors Facilities
- ...

Work Zone Leaders



Cane detectable
walk zone



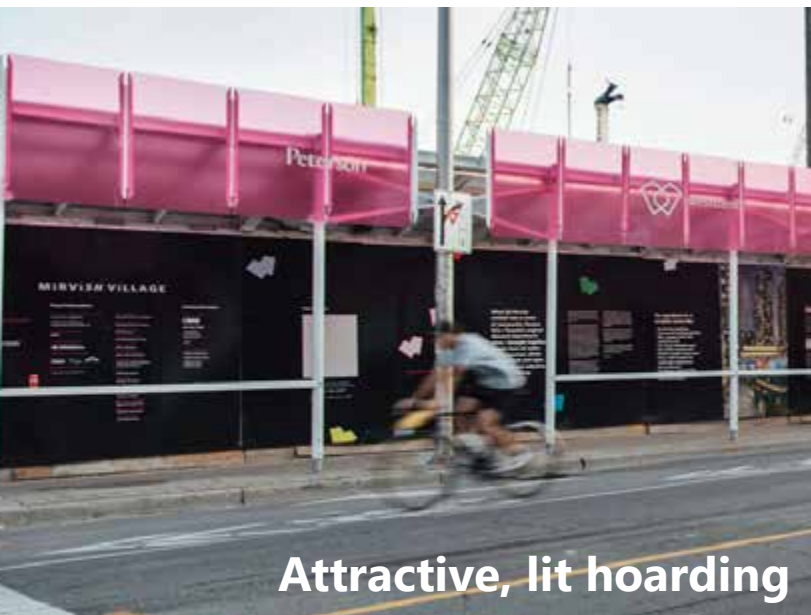
Accessible, signed detour



Community engagement



Temporary ramps
and tactile domes



Attractive, lit hoarding

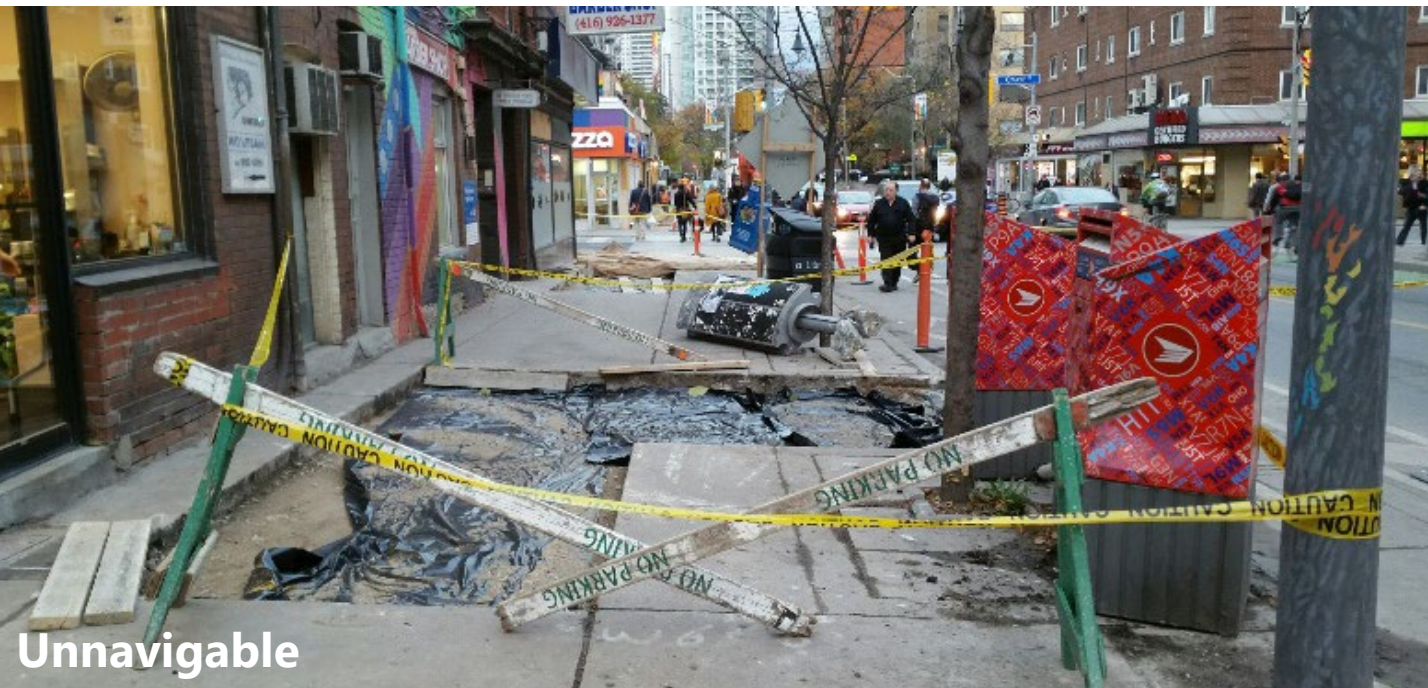


Clearly marked accessible bike detour



Temporary accessible
sidewalk in curb lane

Work Zone Issues





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Lessons Learned, Best Practices

What is a Construction Hub?

An area with a **dense concentration of construction** **impacting mobility** in the public right of way.



What is Construction Hub Coordination?

Approach:

Construction Coordination

Community Support

Business Support

Communication & Engagement

Key Principles that guide the Approach are:

Safety



Equity



Vibrancy



Innovation



Engagement



Safety

Vision Zero directs better pedestrian and cycling access through construction zones with recently updated standards (2017)

Engage proactively with truck operators to increase safety in neighbourhoods



Equity

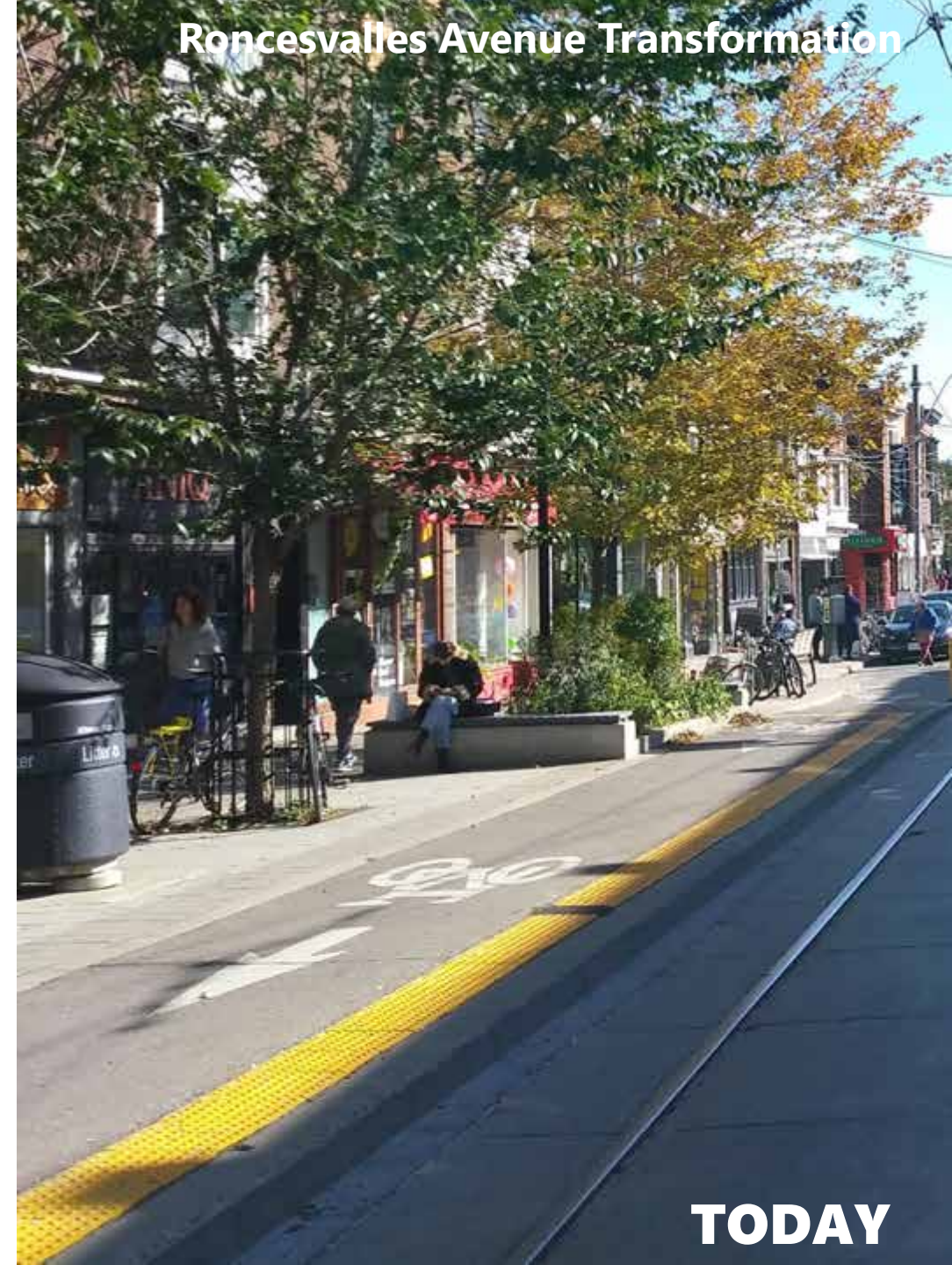
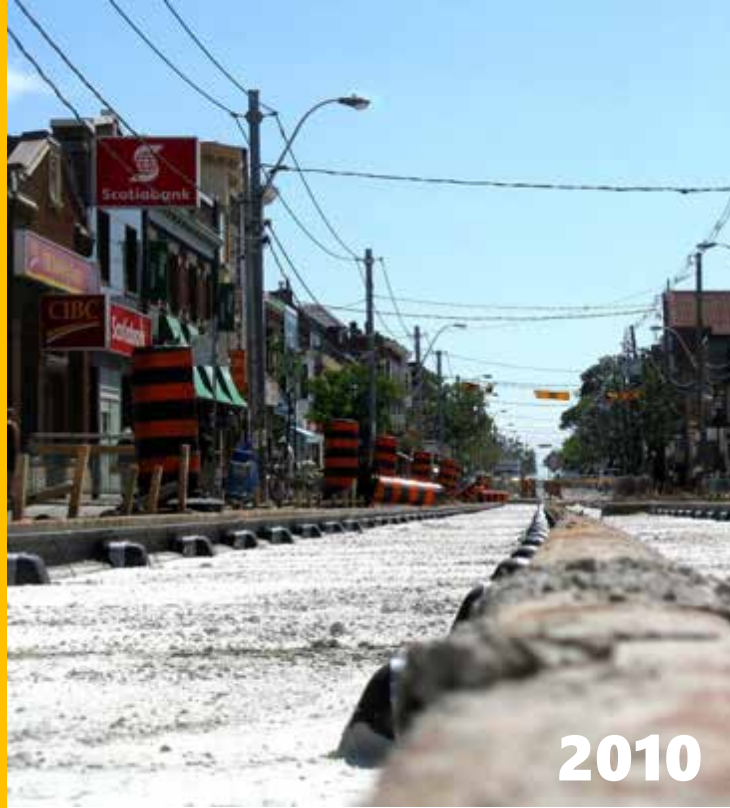
Minimize disruption to the travelling public, especially the most vulnerable, through clear and coordinated construction management activities



Accessible Alternatives Required

Vibrancy

Coordinate public and private construction; manage parking and loading to support liveable, accessible neighbourhoods, work with the businesses to forecast and keep disturbances at a minimum



Roncesvalles Avenue Transformation

Innovation

Deliver our services more efficiently by investing in technologies both in the office and in the field that give our team real-time information to solve problems



Real-time Information in the Field



Engagement

Clear communication protocols

Engagement with the residential and business community as well as the development and contractor community

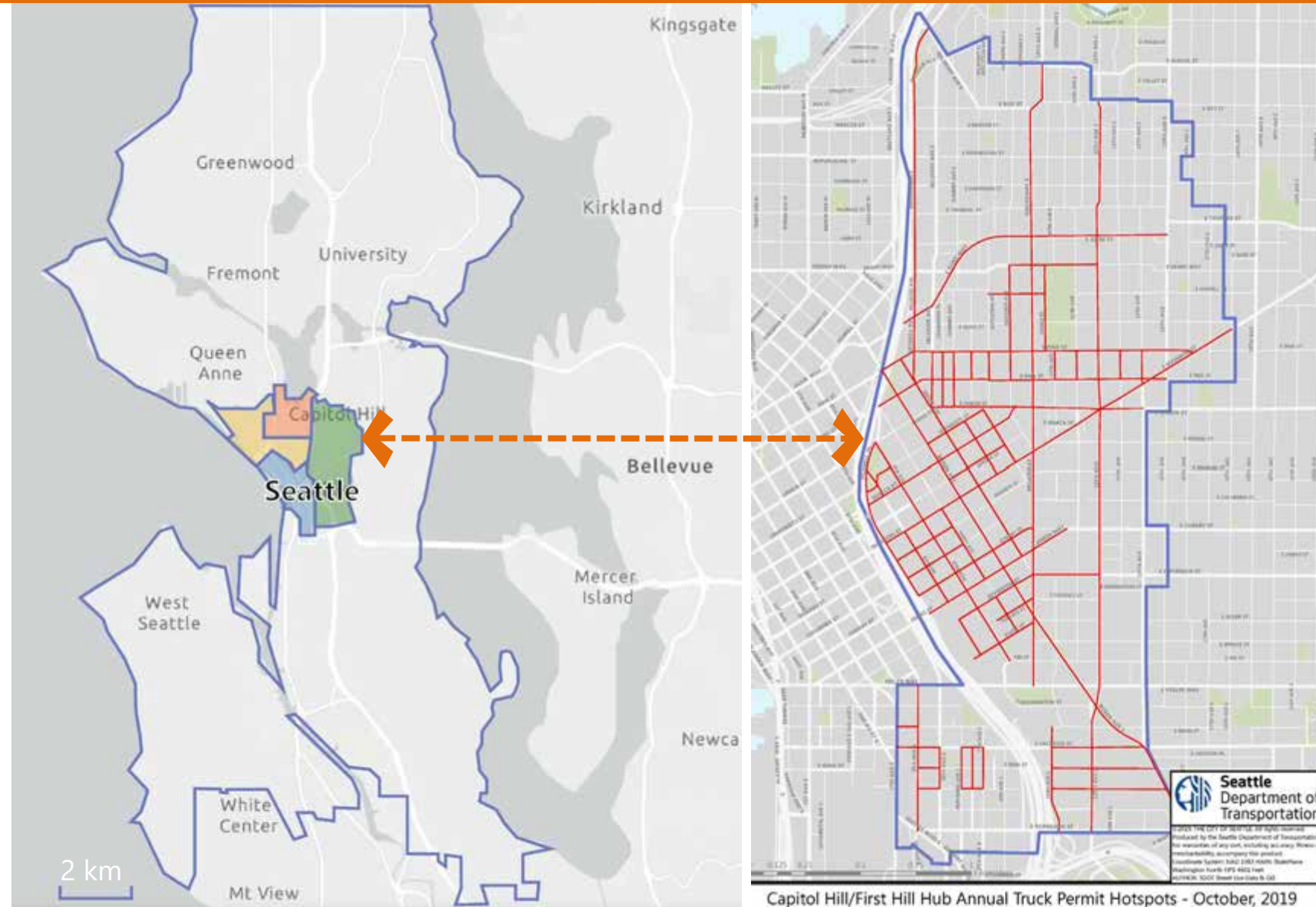


Engage All Stakeholders



Best Practice: Seattle Construction Hubs

- **Population 724,000**
- **Fastest growing city in America** – 18.7% since 2010
- Suffered from lack of coordination
- **In 2016, implemented 4 Construction Hubs** for areas identified as high risk for mobility conflicts
- Monthly issued **hotspot maps**
- **Bi-weekly Construction Hub Coordination Committee meetings**

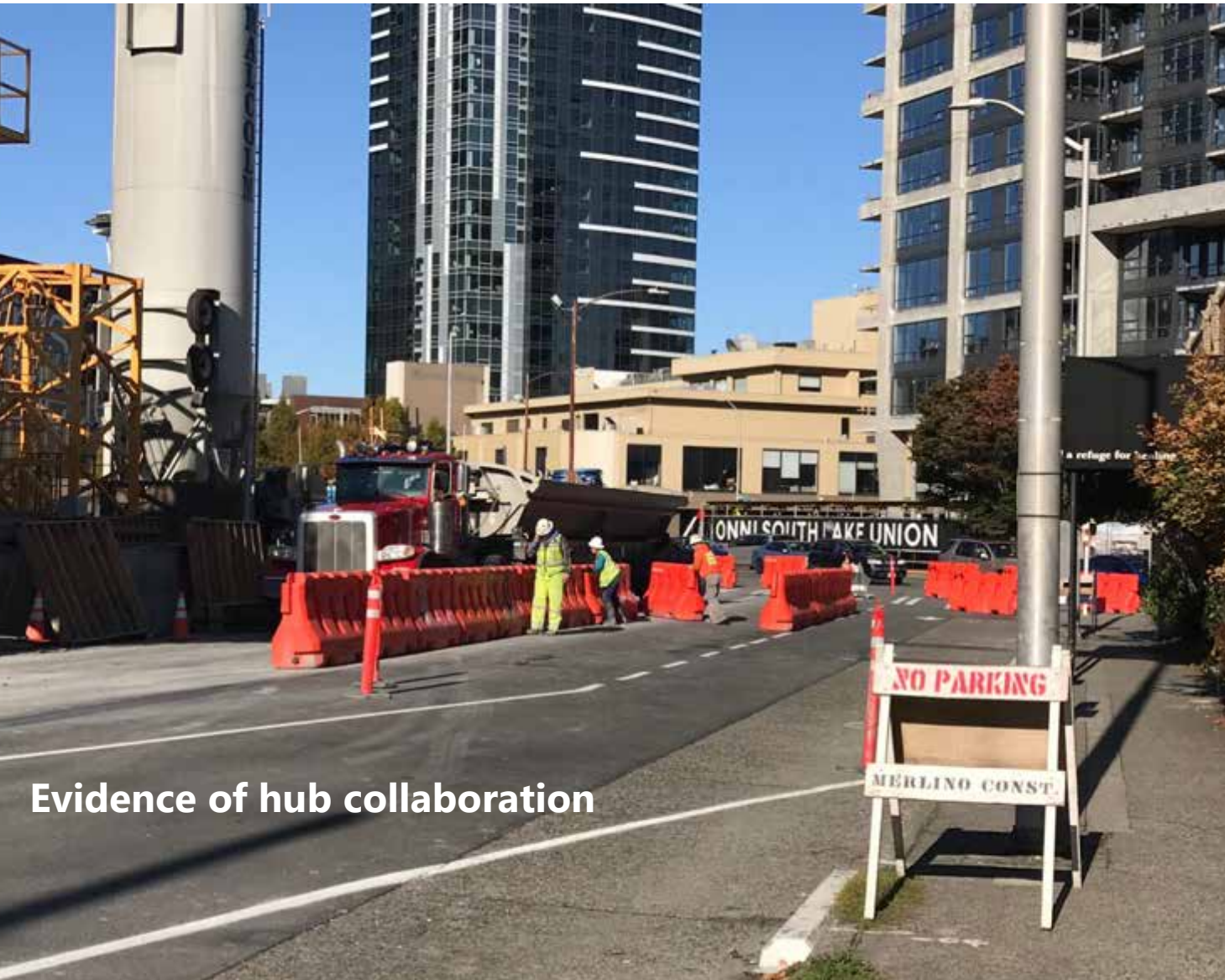


The Approach hinges on having on the ground Hub Coordinators

- Individual and **single point of contact** assigned to provide oversight to the Construction Hub
- Working with each of the constructors to gain a **3-week look ahead** in terms of construction activities planned
- Able to **better coordinate activities between the constructors**
- Able to **improve upon traffic management plans** to ensure the safety of vulnerable road users
- Able to act as '**Ambassadors**' to the communities and local businesses
- **Better communication** to all effected parties



Seattle Hubs



Evidence of hub collaboration



Construction Hub Coordinator

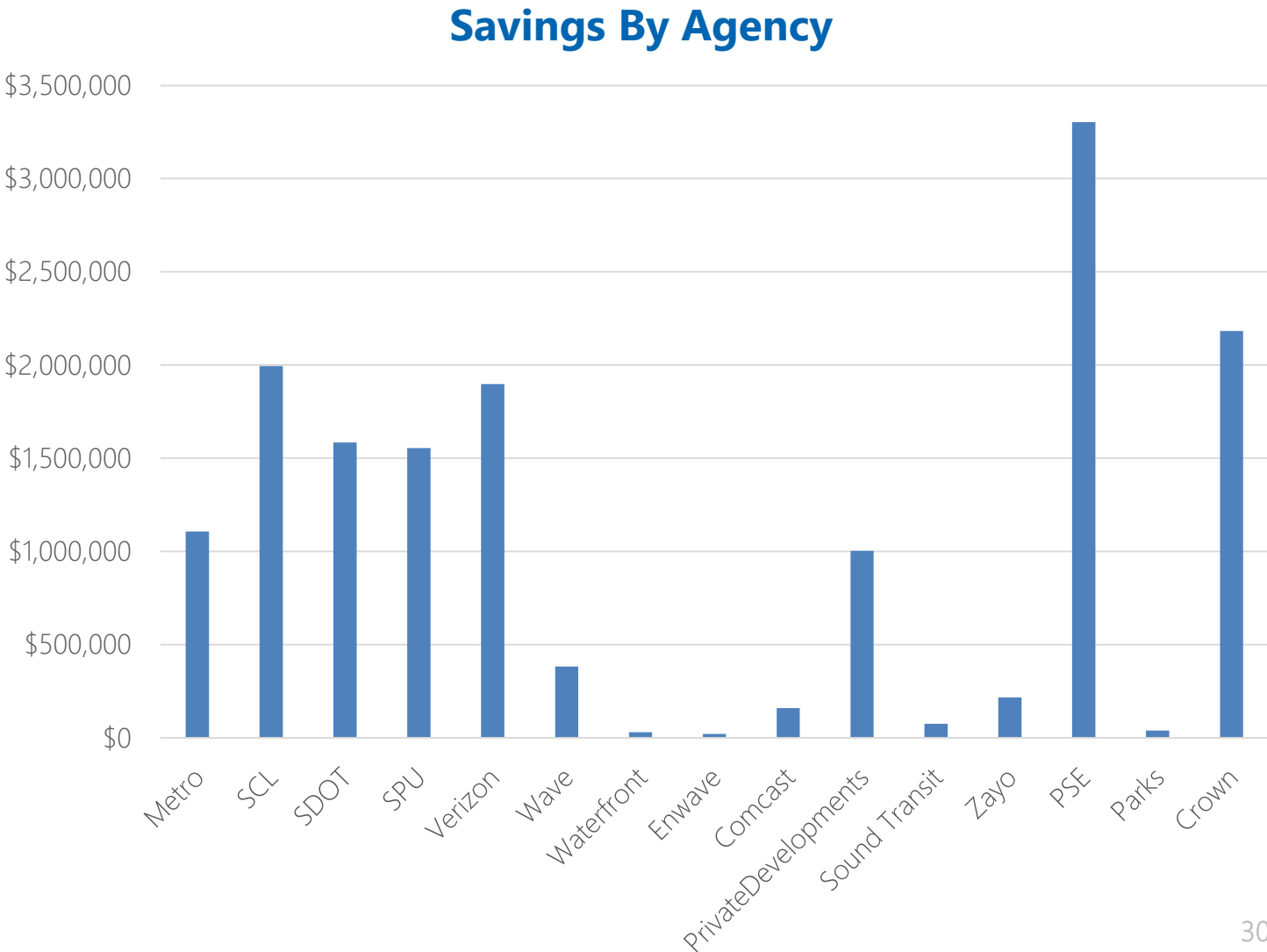


Cane detectable temporary fencing

Seattle's Coordination Savings

Savings calculated based on points of coordination resolved:

- **200 days** of construction
- **\$15.5M** savings by **all** partners
- **\$1.6M** savings by the **SDOT**
- **1,600 tons of CO₂ carbon equivalent**





3

Applying Lessons to Toronto, Construction Hub Coordination Pilot

Ensuring Safe, Vibrant and Accessible Neighbourhoods During Construction

Toronto must **improve the coordination** of construction activities to better serve the community, businesses and travellers.

Toronto must **use a collaborative model** to engage industry leaders to create a local version of best practices that yields immediate and lasting results.

We have a **toolkit**, but the parts need to be upgraded and better connected.

Hubs need to be identified and field activities more consistently managed using a “**single point of contact**” model.

Construction Hub Coordination Pilot

To support a safe, vibrant & accessible **Yonge-Eglinton** area during construction

- Midtown is home to **61,000 residents** and **34,000 employees**
- The Development Pipeline would **add ~ 25,000 additional residents** and **130,000 m² non-residential GFA***
- The **estimated construction value** of the active permits issued in the Pilot area **since 2016 is \$1.2 billion.**
- **High traffic demands;** Pedestrian and cycling access to transit and other neighbourhood destinations
- **Existing safety concerns**

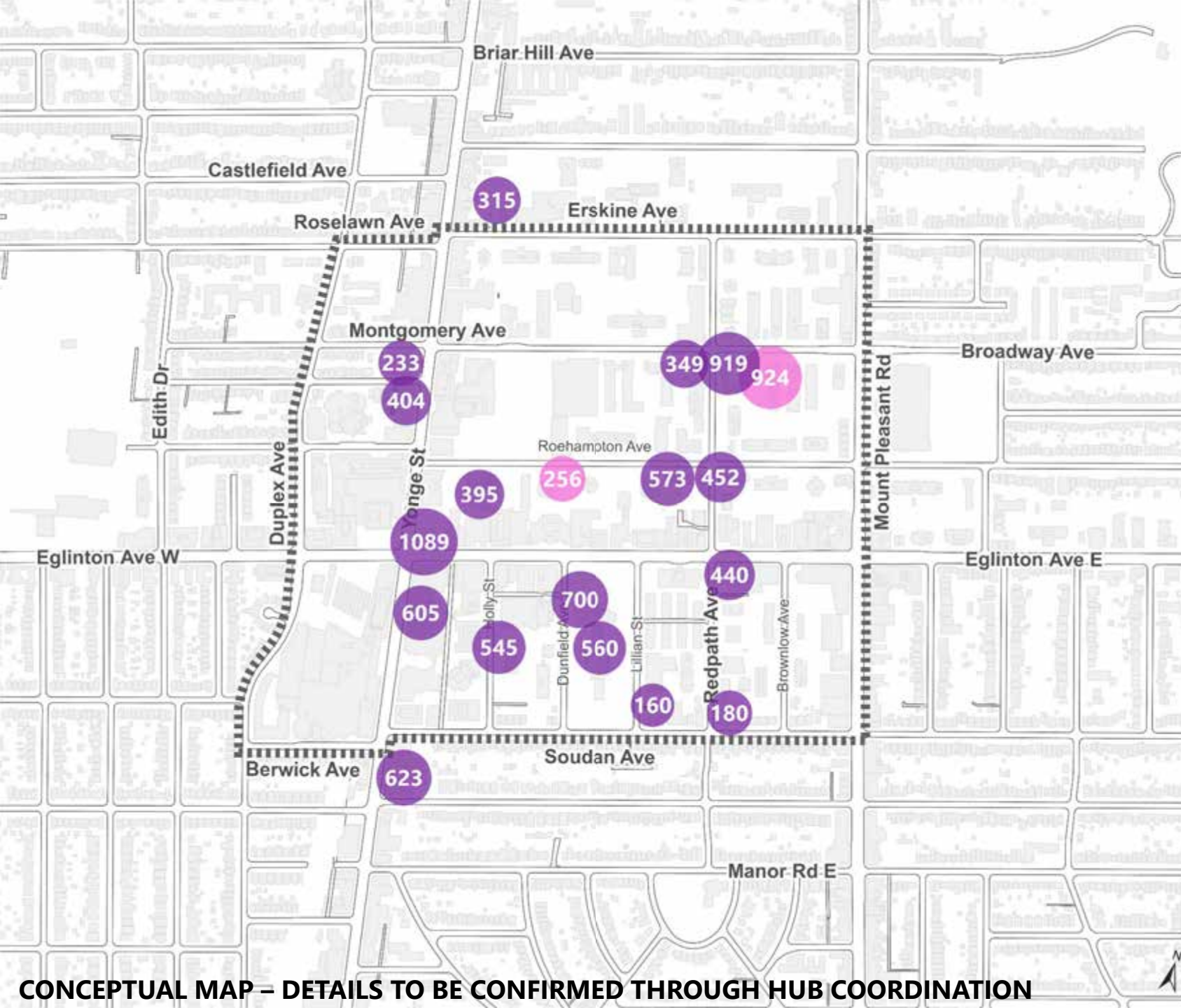


*under review given the modified OPA 405 works

Development Pipeline

Active Developments
By total residential units

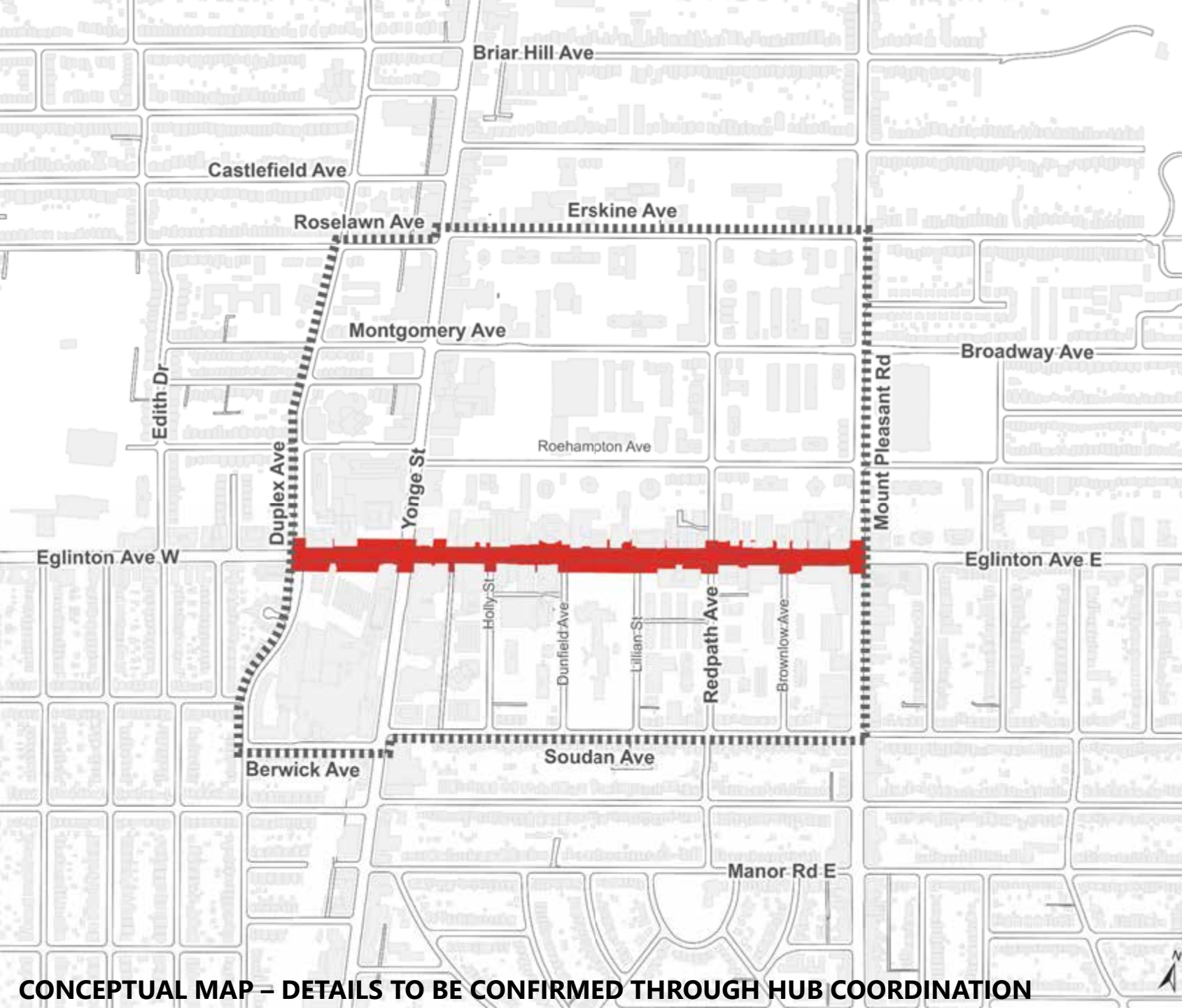
Permit Applications
By total residential units



CONCEPTUAL MAP – DETAILS TO BE CONFIRMED THROUGH HUB COORDINATION

Metrolinx

Eglinton Crosstown Light Rail Transit

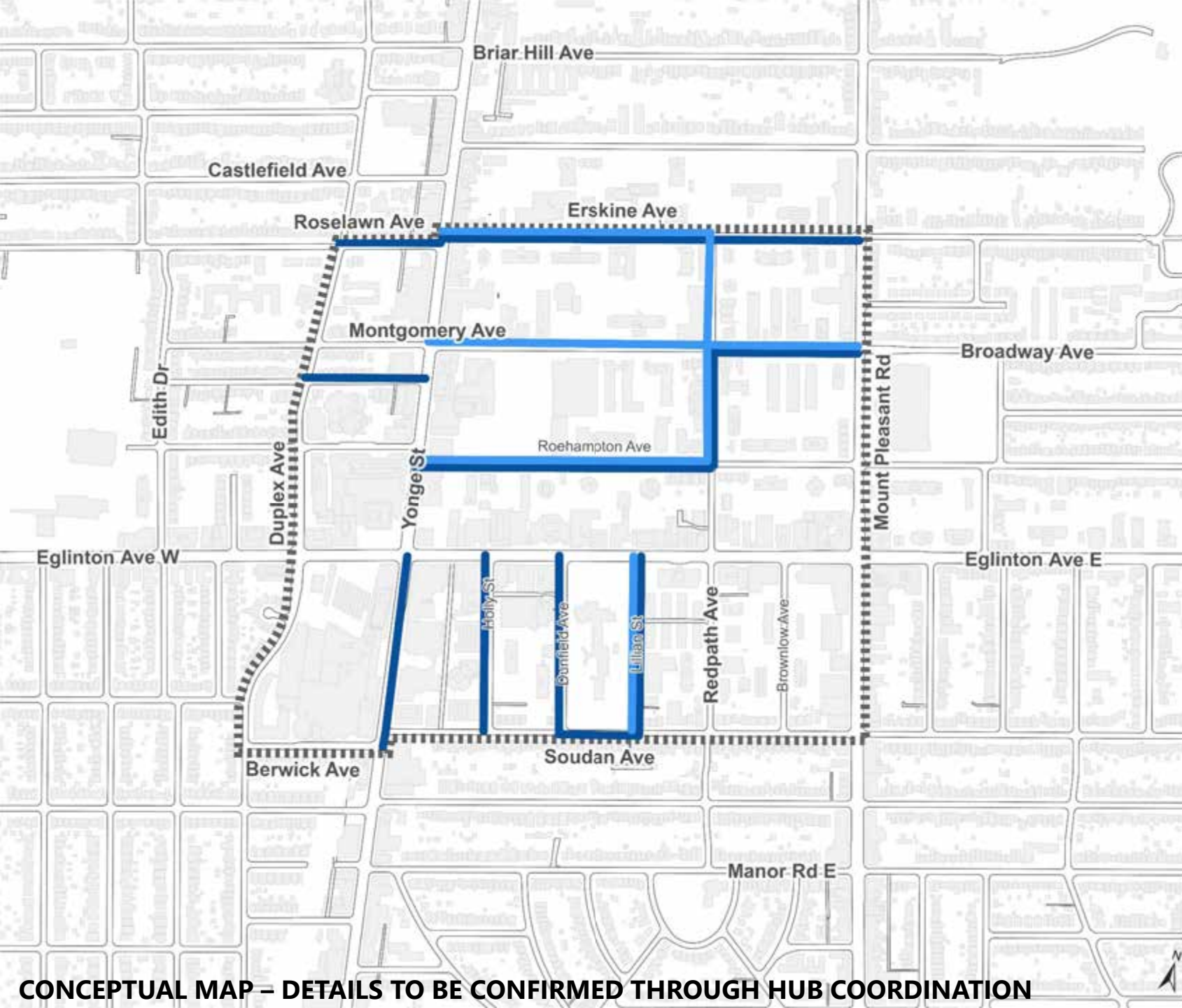


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Utilities

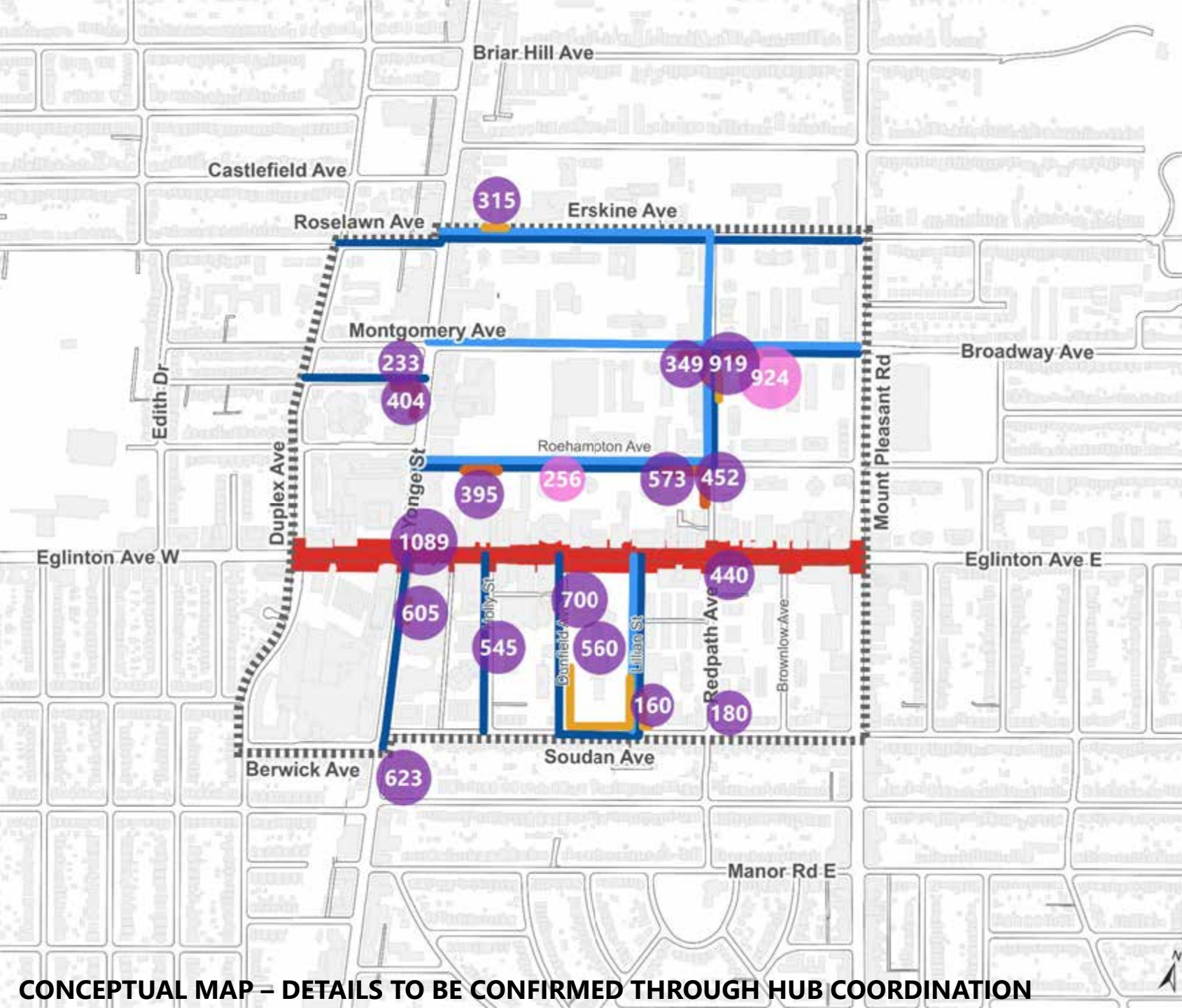
Rogers Communications
Installation of new cables

Toronto Hydro
A combination of work on
underground and
overhead infrastructure



Sidewalk Sidewalk and Curb Lane





Active Developments
By total residential units

Eglinton Crosstown
Light Rail Transit

Rogers Communications
Installation of new cables

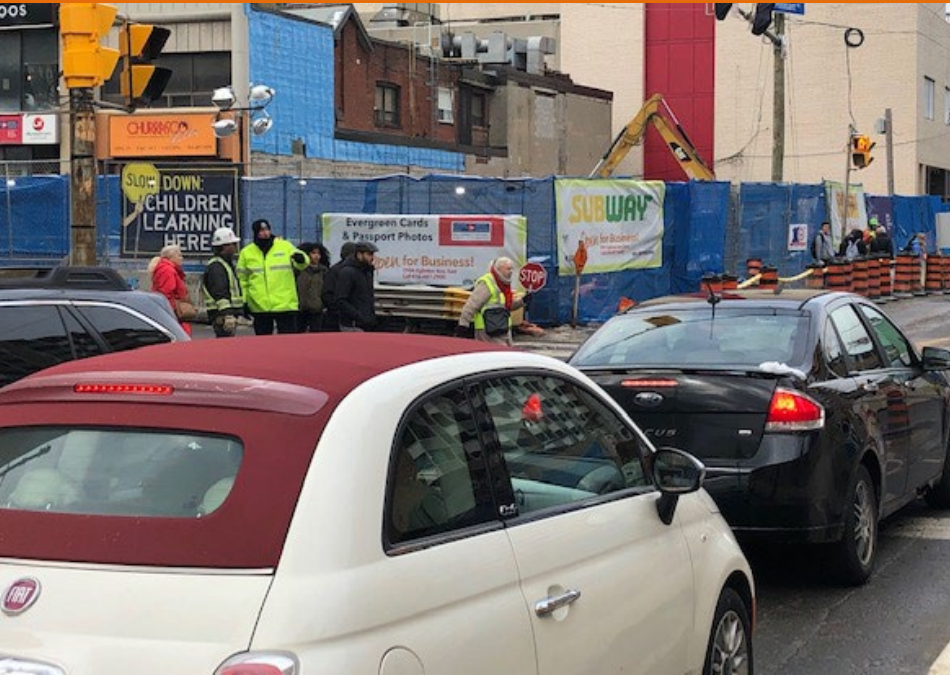
Toronto Hydro
A combination of work on
underground and
overhead infrastructure

Right of Way Permits
Sidewalk and curb lane
occupation

Sample of Area Construction



Area Mobility and Safety Challenges



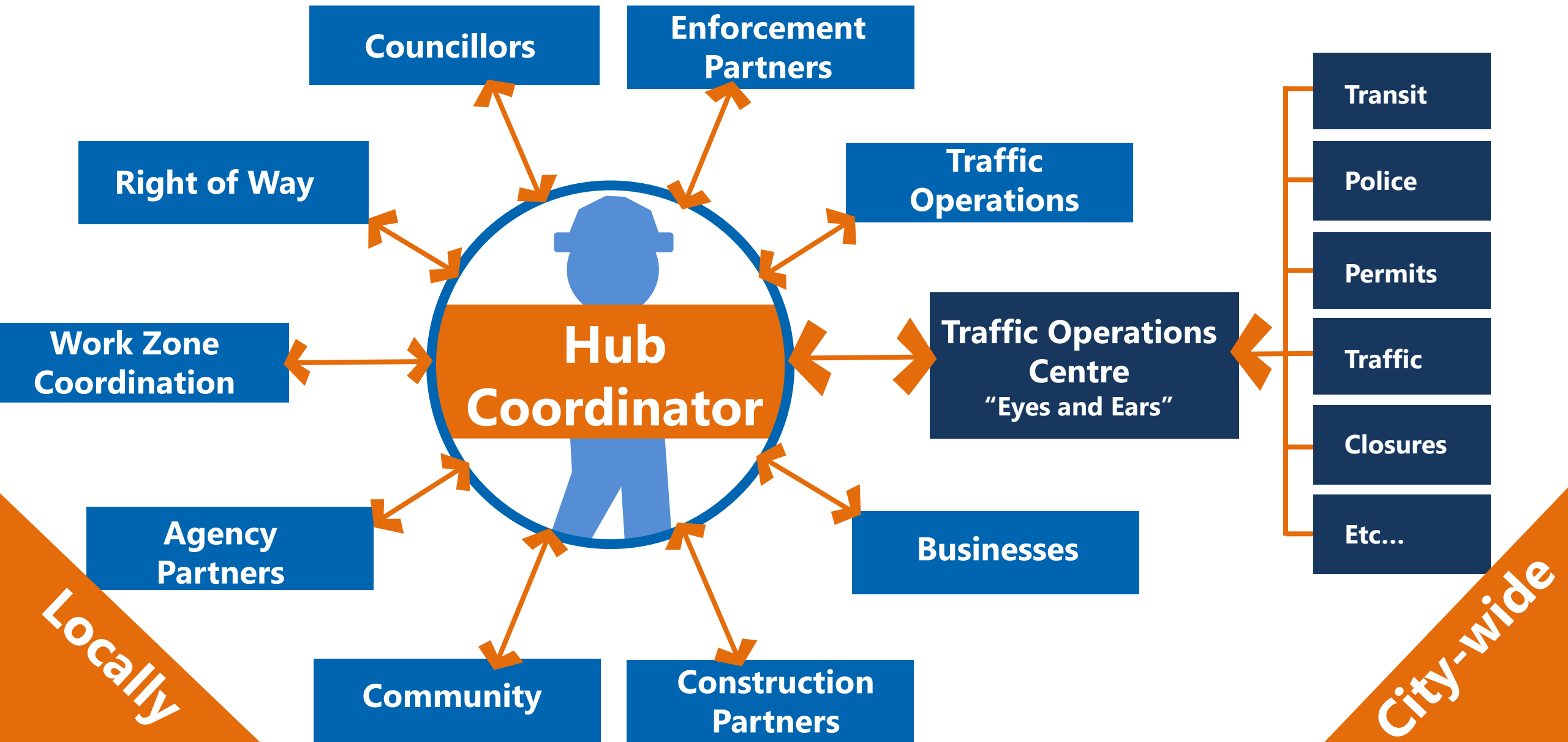
Role of the Toronto Hub Coordinator

- Conduct **Logistical planning of the right of way**
- Coordinate resources to **manage work zones**
- Support developers, businesses and residents with **“single point of contact”** resolution
- Review the **Construction Management Plans**
- **Connect travellers with real-time information**
- **Forecast changes** in the neighbourhood and **collaborate with enforcement officers**
- **Communicate impacts early and often** and to key neighbourhood stakeholders



**Media announcement November 15, 2019:
Toronto Construction Hub Coordination Pilot**

Single Point of Contact



Workplan Phases

Phase 1

Nov 2019 - Dec 2020

**Construction Hub
Coordination Pilot**

Phase 2*

2020 - 2021

*Pending Pilot Results

**Establish the
Construction Hub
Coordination
Program**

Phase 3

To Be Determined

Legislative Changes

Communications

Objectives:

- Ensure timely, consistent and clear communications about CHC.
- Build early public awareness and stakeholder engagement.
- Convey the importance of construction coordination in Toronto.

A communications plan will have the following potential tactics:

- Canada Post mail outs.
- Expanded webpage (information, resources, important alerts, etc.).
- Consistent and clear updates to 311 knowledge base.
- Social media messaging.

Immediate Next Steps

- Finalize communications plan (Strategic Communications)
- Pilot Launch – December 2019
- First Bi-weekly Hub Coordination Meeting with Constructors
- Hub Coordinator to conduct daily field walk-about

Construction Hub Coordination



Ensuring Safe, Vibrant and Accessible Streets



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toronto.ca/constructionhub

Image Sources

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Slide 4 (top). Ted Chai Photography
Slide 4 (bottom left). Androiduk, Urban Toronto
Slide 4 (bottom right). Claudecormier.com
Slide 5. (background). thecondoconnect.ca
Slide 5. (foreground). Based on RLB Crane Index
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