Construction Hub Coordination

Ensuring Safe, Vibrant and Accessible Streets

November 25, 2019
Overview

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

Affordable Housing and Cultural Hub

Street Revitalization

Open Space Destination
Toronto has the most cranes in N. America
Local trends in growth and development...
2019 Transportation

Metroline
Toronto Transit Commission
Transportation Services
Ministry of Transportation
Waterfront Toronto
Other Major Construction
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
Businesses and residents live with construction pain.

- Blocked Cycle Lanes
- Lengthy Street Closures
- Reduced Mobility
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
- ...
- RESCON
- BILD
- Trucking industry
- Sewer & Watermain Constructors
- RMCAO
- Crane Rental Association
- ...

Industry Partners
“How will people access my business? Will this impact my bottom line?”
- BIAs
- Building Managers & Owners
- Delivery Providers
- ...
- Vulnerable Users
- Pedestrians
- Cyclist
- Transit User
- Driver
- Walk Toronto/Cycle Toronto
- ...

Businesses
“How will I get to my destination safely & on time?”

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

Community
“How will this impact my property & my area?”
- BIAs
- Building Managers & Owners
- Delivery Providers
- ...
- Vulnerable Users
- Pedestrians
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Industry Partners
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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

Confusing and not cane detectable

No bicycle accommodation

Unnavigable

Temporary bus stop not accessible
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
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.
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.
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.
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**
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
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Utilities

Rogers Communications
Installation of new cables

Toronto Hydro
A combination of work on underground and overhead infrastructure
CONCEPTUAL MAP – DETAILS TO BE CONFIRMED THROUGH HUB COORDINATION
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

Eglinton Crosstown

91 Broadway Ave
33 Dunfield Ave
39-41 Roehampton Ave
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
Single Point of Contact

- Councillors
- Enforcement Partners
- Right of Way
- Traffic Operations
- Traffic Operations Centre “Eyes and Ears”
- Work Zone Coordination
- Transit
- Police
- Permits
- Community
- Businesses
- Construction Partners
- Etc...
- City-wide
- Locally
Workplan Phases

Phase 1
Nov 2019 - Dec 2020
Construction Hub Coordination Pilot

Phase 2*
2020 - 2021
Establish the Construction Hub Coordination Program
*Pending Pilot Results

Phase 3
To Be Determined
Legislative Changes
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

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