

Subject: **Neighbourhood Traffic Management Study – Draft Terms of Reference**

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The following document provides a draft Terms of Reference for a Neighbourhood Traffic Management Study (NTMS) related to the New Campus Development (NCD) for The Ottawa Hospital (TOH).

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## **1.0 Introduction**

### **1.1 What is the TOH Neighbourhood Traffic Management Study (NTMS)?**

- **Provide the Background, Context and Direction**
  - How did we get here?  
[Direction from Council for NCD Master Site Plan and supporting TIA and Mobility Study](#)
  - Why do we need a NTMS? Why is it important?  
[Traffic infiltration; risks of short-cutting due to congestion on adjacent streets. Scale of NCD development and future phases on adjacent communities.](#)
  - Who is involved in the NTMS?  
[Extensive consultation including community committee, City of Ottawa, local Councillors, TOH leadership](#)
  - What happens after the NTMS?  
[This document will accompany the Site Plan Submission for the Main Hospital Building – Phase 4](#)
- **Provide an Overview of the Plan**
  - Describe objectives - What will the NTMS do?  
[Identify potential traffic implications/vulnerabilities in the municipal network/neighbouring communities stemming from the NCD. Define a procedure to monitor off-campus traffic implications \(such as speeding, short-cutting, corridor safety\) over time, and a mechanism for the public/stakeholders/City of Ottawa to engage and react collaboratively with TOH. Provide TOH with the tools and guidance on how to mitigate various traffic impacts.](#)
  - Outline the key report sections – what will the NTMS cover?  
[Engagement; Identify Issues/Opportunities; Developing the Toolkit; Recommended Plan](#)
  - What will it NOT cover?  
[Parking implications will be discussed in detail in the OPS or TDM Strategy.](#)
- **Summarize any Definitions**

## 1.2 How will the NTMS Study be Developed?

- **Highlight the Stakeholder Engagement and Outreach**
  - Summarize the engagement process  
Community consultation (Community Advisory Council and Transportation Subcommittee), City departments (Neighbourhood Traffic Management, Transportation Network Modifications), the Central Experimental Farm  
Show Community Association Map – with study area outlined.  
Showcase efforts in outreach – document # of meetings with various groups
  - What did we hear?  
Summarize the key concerns from each group.
- **Describe the Study Scope and Process**
  - Define the study area  
Holland/Hwy 417/Bronson/Central Experimental Farm  
Describe infrastructure – pedestrian, cycling, transit  
Reference key destinations that may drive activity (existing Civic, Dow's Lake, Preston commercial areas etc.) and show on map
  - Cite relevant studies  
Ongoing Sherwood Traffic Calming Plan (TCP), any streets near Civic? (request from City)  
Guiding Documents (Ottawa Traffic Calming Guidelines (TCG), 30 kph Toolkit, Neighbourhood Collector Streets)
  - Outline the study process  
Scope to be vetted by City, Community Advisory Council and Transportation Subcommittee to ensure consensus on study approach/methodology; identify vulnerable streets; develop a baseline with new data collection; develop solutions that apply best practices and collaboration with City staff/committee to ensure they make sense to stakeholders; develop framework and Toolkit based on analysis supported by stakeholder outreach; submit to City staff for approval.

## 2.0 Identifying Issues and Opportunities

### 2.1 Existing Policies and Procedures

- **Summarize the guiding policies and procedures**
  - New OP – any relevance to NTMS within Study area?
  - City Guidelines – TCP, designing neighbourhood collector streets, 30 kph toolkit, Transportation Impact Assessment (TIA) Guidelines
  - Renewal program  
Describe the City renewal program that targets aging infrastructure (typically sewers) within the municipal network and incorporates surface works/rehabilitation to a contemporary design (e.g. 30 kph toolkit)
  - What is the City's enforcement mechanism under normal conditions?  
City of Ottawa currently has a traffic calming procedure that is open to the public, that is administered through the Neighbourhood Traffic Management Branch. Describe further.
  - During Special Events?  
Does the City/NCC have any event strategies within study area? (Tulip Festival, Winterlude etc?)

### 2.2 Data Collection

- **Describe the Approach and Methodology**
  - Describe where we will collect data. We will complete a full study area inventory, and site visit. However, it is impractical and unnecessary to collect traffic data for every street/intersection within the study area (e.g. speeds, volumes, origin destination (OD) etc.) (Streetlight license would be a benefit). Certain streets can be ruled out as vulnerable based on their location, length, and context, and in doing so enables a more focused data collection program, emphasizing streets that are currently vulnerable to traffic impacts or expected to be vulnerable in the future when the NCD is fully operational. This process will be vetted by City Staff and the Community Council.

- Site Visit to inventory entire study area – [Note the dates \(April 8 and 12, 2022 +++\)](#)
- Traffic data collection method - Speed gun; surveyors; and/or Streetlight platform (STL)
  - [Corridor speeds – STL or speed gun](#)
  - [Corridor volumes – tube count or STL](#)
  - [Intersection volumes – recycle TIA and expand with surveyors if noted new locations of concern \(check City database\)](#)
  - [OD – STL or license plate survey](#)
  - [Long vs Short Trips – STL](#)
  - [Collisions – City of Ottawa](#)
- Periods
  - [Weekday and weekends during staff anticipated shift change \(morning and evening – assume future is similar to existing Civic\), and peak visitor periods \(confirm\)](#)
- Evaluation the vulnerable streets using criteria
  - [City TCP requirements to evaluate speeds, short-cutting – 85<sup>th</sup> percentile speed, license plate survey etc. \(review\)](#)
  - [City TIA guidelines thresholds – peak hour volume corridor thresholds \(120vph – local; 300vph – collector; 600 vph – major collector\)](#)
  - [Industry standards/design criteria \(Transportation Association of Canada \(TAC\) volume thresholds and TAC TCG 2018\)](#)
- Other Sources
  - [Any data from City – Sherwood TCP, other studies \(adjust data collection program based on available info from other sources if applicable\)](#)

## 2.3 Where are the Vulnerable Streets?

### Existing

- **Summarize what was heard from outreach with public and stakeholders**
  - Understanding public concerns with traffic today will help us determine how best to address these concerns in the future.
  - We will track locations of concern and record the perceived severity heard during the engagement process, which will be validated as part of this assignment.
    - [Provide map summarizing locations/issues/severity based on stakeholder](#)
- **Describe the streets (classification, # of lanes, posted speed, etc.)**
  - It is important to understand the City road hierarchy, which defines the form and intended function of different streets in the City. Some roads are designed to accommodate higher levels of traffic volumes and intended to move non-local traffic.
  - To help identify the vulnerable streets, we must first define the road and neighbourhood characteristics within the study area.
  - Focus on local or collector streets within residential contexts or have sensitive land uses
    - [Provide map of the study area with road classifications \(City TMP/GeoOttawa\) – do they support stakeholder concerns?](#)
- **Reference and summarize intersection analysis from TIA**
  - Recycle from TIA Mobility study – existing analysis.
  - Where are the bottlenecks in the system
    - [Provide map with operational results – do they support stakeholder concerns?](#)
- **Identify the location and type of existing traffic calming measures within study area**
  - Horizontal/vertical deflection, signage, pavement markings etc.
    - [Provide summary map – do they support stakeholder concerns?](#)
- **Understand the Existing Civic Campus context**
  - Travel Trends - Streetlight Top Routes/OD results or postal code map and estimate
  - What are the current challenges?
  - What initiatives/programs have been done or are ongoing to combat traffic infiltration/neighbourhood impacts? (TOH and City)
    - [Do they support stakeholder concerns?](#)

#### Future

- **Identify future development applications**
  - Anticipated development/intensification locations in future (Dev Apps) – Reference TIA and Mobility Study, review Dev Apps for new developments (May not need this if there is no new information since Master Site Plan TIA)
- **Describe The New Campus Development**
  - Anticipated # of employees, students, patients, and visitors
  - What are the forecasted traffic volumes? Forecasted network operations?
  - What is the traffic management plan?  
Reference TIA Mobility Study TDM Strategy, proposed intersection designs
  - What are the anticipated challenges?
- **Identify Future Travel Patterns**
  - Map out anticipated changes to neighbourhood traffic patterns in the study area, which corridors will increase/decrease with changes in hospital location?  
Without a travel demand model, this will be based on first principles (anticipated ODs), engineering judgment, and consultation with City staff.  
Provide map

#### Identify the Degree of Vulnerability

- The vulnerability of study area streets will be placed in one of three tiers. The Tier for each street will be based on the severity and validity of concerns defined in the previous chapter.
  - **Tier 1** – Highly vulnerable: requires pre-emptive mitigation, forms part of recommended plan and continual monitoring
  - **Tier 2** – Moderately vulnerable: no pre-emptive mitigation, but will be monitored over time. TOH/City to respond collaboratively to public concerns by first determining if a response is warranted, then develop a mitigation plan. Any issues flagged in monitoring would be addressed using the available toolkit and consultation with Staff/community council.
  - **Tier 3** – Low vulnerability: locations were not deemed a risk for neighbourhood impacts; no pre-emptive mitigation, no monitoring required.
- Complete data collection on ONLY Tier 1 and Tier 2 vulnerable streets to confirm current status, to help define appropriate mitigation and establish a baseline for future monitoring.  
Discuss and provide summary map of the vulnerable streets.  
Only Tier 1 and 2 vulnerable streets will have data collected, define specific program with Staff  
Likely candidates:
  - Tier 1: Sherwood, Champagne, Old Irving
  - Tier 2: Beech; Lakeside, Bayswater, Fairmont, Madawaska, Dow's Lake Rd, Powell, Bell, the NCC Driveway

## 3.0 The Traffic Management Toolkit

### 3.1 Identify the Framework

- **Describe approach and key concepts to ensure success of NTMS**  
Stress the importance of communication/collaboration between TOH and stakeholders, ability to react quickly, culture change, etc.
- **Describe Best Practices:**  
Based on City of Ottawa TCG (2018) and 30kph residential local street toolkit – need discussion with City on viability. Current mechanisms discussed earlier?

### 3.2 The NTMS Toolkit

- **Summarize all potential interventions** – reference City TCG (include images as needed), TAC TCG, and other sources

- **Provide descriptions (type, effort, effectiveness etc.)** – decide on order (whether by cost, effort etc.)
  - Policy related, e.g. road reclassifications, changes in regulations?
  - Type - Horizontal Deflection, Vertical Deflection, Signage, etc
  - Effort: Short vs long lead-time
  - High/medium/low effectiveness
- **Summarize temporary measures for events? (e.g. Winterlude or Tulip Festival)**
  - Can we piggyback on any existing programs/strategies?

## 4.0 The Recommended Plan

### 4.1 Baseline Data

- **Summarize the results from baseline data collection on identified Tier 1 and 2 locations**
  - Collect relevant data outlined in Section 2.2. – tailor each corridor to specific issues identified
  - Use 2019 data where possible

If Streetlight access is available – assess data from 2019 and 2021/early part of 2022

### 4.2 Summary of Recommendations

- **Prepare concept map showing location and types of measures for Tier 1 Vulnerable Streets (pre-emptive mitigation)**
  - Synergies with City Renewal Process?  
*Are any streets 30kph eligible? Any renewals within next 5 years nearby that could be integrated with recommendations?*
  - Specs? Concept Designs?

### 4.3 Monitoring and Implementation

- **Outline method of administration:**
  - Identify how the recommended plan will come to fruition
  - How will public concerns be received and processed that relate to NCD  
*Can we use City of Ottawa existing Traffic Calming Program?*  
*And ensure there is a protocol to engage TOH if any concerns are raised within study area through the Community Council*
- **The Monitoring Strategy will detail the monitoring process for each supporting study and start the discussion about implementation for all supporting studies**
  - How will future implementation be coordinated? Through City Neighbourhood Traffic Management Branch?
  - There will be ongoing discussion regarding funding and potential cost sharing
- **Describe process for Functional/Detailed Design/construction of recommended plan and required approvals (e.g. City of Ottawa RMA process)**