Document 2

Executive Summary

The following executive summary provides a high-level overview of each of the sections within Parts 1, 2, and 3 of the Traffic Calming Design Guidelines.

Part 1 – Ottawa-Specific Design Guidance

1. Introduction

Traffic calming refers to measures and street design elements aimed at improving quality of life by helping achieve a number of supporting elements. This includes improving safety for all street users – particularly for those walking and cycling. Traffic calming is also used as a tool to improve the public realm, helping meet broader policy objectives related to encouraging sustainable modes of travel, and helping create a better sense of "place".

It aims to help achieve these objectives by reducing impacts of motorized vehicles on neighbourhoods and supporting safer street environments.

The focus of this Guide is primarily in reference to traffic calming concepts for retrofits to existing streets, but it can also inform new street designs as well. Furthermore, traffic calming in this Guide is referred to primarily in terms of its transportation implications and includes both measures and concepts that relate to driver behaviour and vehicle traffic management options.

Traffic calming measures are grouped as follows in the Guide:

- Communication and Enforcement: measures and programs that raise awareness and educate the public
- 2. Minor Adjustment: measures that can be implemented with limited intrusion
- 3. **Engineering**: physical measures implemented as permanent changes to the street

Measures and design options from each of these groups can be used in combination with one another in order to create an overall traffic calming concept.

This section of the Guide also provides general information about:

- when to consider traffic calming;
- considerations to pursue prior to permanent Engineering traffic calming measures; and
- Potential benefits and impacts of traffic calming.

Finally, this section provides guidance about where, when, and how traffic calming is considered in Ottawa.

2. Traffic Calming Plans (TCPs)

A Traffic Calming Plan (TCP) includes all the elements that lead to a recommended traffic calming concept for implementation. Developing a TCP is intended to ensure that traffic calming installations are sensitive to a range of factors and interests. A TCP should include the following elements:

- 1. Strategic Approach
- 2. Study Limits
- 3. Existing Conditions
- 4. Public Stakeholder Engagement
- 5. Traffic Calming Concept
- 6. Monitoring and Evaluation

This section of the Guide describes each of the aforementioned elements in more detail.

3. Design Considerations for Traffic Calming Concepts

This section of the Guide presents a number of considerations to help proponents undertake functional-level designs of traffic calming concepts including:

- 1. Relevant guidelines and manuals
- 2. Ottawa-specific design considerations:
 - 1. General Design Considerations
 - 2. Accessibility, Equity, and Inclusion in Traffic Calming Concepts
 - 3. Active Transportation
 - 4. Transit (OC Transpo)
 - 5. Street Maintenance
 - 6. Emergency Response
 - 7. "Pinch Points"
 - 8. Turning / Corner Radius Design
 - 9. Streetscaping and Traffic Calming
- 3. Temporary / Seasonal Traffic Calming Materials

4. Consideration of New Innovations and Technology.

4. Quality Control and State of Repair

In this section, the Guide provides information about the City's various programs and processes that are in place to help ensure quality design is consistent and sustainable on our roads to the greatest extent possible.

It also describes key considerations for when considering exceptions to the content if the guidelines as well as traffic control measures not intended for traffic calming purposes.

5. Public Education, Future Needs, and Updating this Guide

This section discusses the importance of public education and future development of this Guide.

Part 2 – Traffic Calming Toolbox

Part 2 of the Traffic Calming Design Guidelines supplements the traffic calming measures outlined in the Transportation Association of Canada's (TAC) Canadian Guide to Traffic Calming, providing highlights and considerations for the implementation of a variety of traffic calming measures in Ottawa. The toolbox includes the following measures:

Communication and Enforcement Measures

- information signage
- speed display devices
- educational campaigns

Minor Adjustment Measures

- pavement markings
 - on-road messaging
 - full-lane transverse bars
- street parking
- vertical centerline treatments

Engineering and Traffic Management Measures

vertical deflection

- raised crossings
- o raised intersections
- speed cushions
- speed humps
- speed tables
- horizontal deflection
 - chicanes
 - corner tightening / curb radius reductions
 - mini-roundabouts
 - bulb-outs
 - lane narrowings
 - o raised median islands
 - road diets
- surface treatments
 - textured crossings
 - textured surfaces
 - transverse rumble strips
- traffic management
 - vehicular directional closures
 - vehicle diverters
 - on-street plazas / vehicle access closures
 - intersection channelizations
 - raised medians through intersections
 - o right-in / right-out islands
- urban design
 - streetscaping
 - gateways

Emerging Measures

- speed kidneys
- · creative pavement markings
- shared spaces
- woonerven ("living streets")
- automated speed enforcement

Part 3 – Glossary and Appendices

Part 3 of the Traffic Calming Design Guidelines includes a Glossary and the following Appendices:

Appendix A – Traffic Calming Implementation Options

Appendix B – Potential Traffic Calming Stakeholders

Appendix C – Comparison of various forms of Vertical Deflection Traffic Calming

Appendix D – Key Emergency Response Streets Identified by Fire Services and Paramedic Services

Appendix E – Traffic Calming Design Guide Feedback Form

Appendix F – Log of Changes to the Traffic Calming Design Guide