

**Approval date:** January 11, 2016

**Resolution No.:** 29/2016

**Subject:** **Transportation Safety Policy**

## Background

Transportation Safety is an important issue for everyone in Penticton which affects all road users including motorists, cyclists, pedestrians, and/or transit users. Penticton is continually investing in infrastructure (sidewalks, bike lanes, crosswalks, intersection improvements, etc.) to make transportation safer within the City. The City of Penticton has also implemented Traffic Calming Measures in front of several elementary schools in the past year in an attempt to reduce speeding in front of schools and make crossing roads safer for children. The City implements these improvements on a prioritized basis within the limitations of the set budgets contained within the annual financial plan.

The City regularly receives requests for Traffic Calming and general traffic complaints regarding Transportation Safety. Instead of dealing with these requests on a case-by-case basis, the Transportation Safety Policy provides a procedure that will standardize the approach for addressing traffic concerns.

The Transportation Safety Policy is a two-part policy which outlines the process to

- i. identify Transportation Safety issues on any City road and implement appropriate solutions, and
- ii. identify, prepare, prioritize and implement Traffic Calming Plans on local residential through roads.

Issues related to Transportation Safety for motorists, pedestrians, cyclists and transit users can include, but are not limited to, intersection improvements, traffic signals, signage, lane markings, pedestrian crossings, sidewalks, speeding, parking, Shortcutting and Sightlines. Transportation Safety issues apply to all of the City's roads.

Traffic Calming issues are typically related to speeding, high traffic volumes, and Shortcutting (perceived or real) on local residential roads. These issues can lead to conflict between owners/users of adjacent properties and motorists using the roadway.

Traffic Calming Measures include a wide range of devices such as speed humps, Curb Extensions, and raised crosswalks. The implementation of Traffic Calming devices have shown to reduce speeds and Shortcutting (therefore reducing traffic volumes) on local residential roads. If some form of physical or operational Intervention is contemplated, this could penalize roadway users who are behaving appropriately, or shift a problem to negatively impact parties at another location. Given the variables that can be involved, and the complexity of establishing behavioral norms, the approach to Traffic Calming will be consultative and

balanced with respect to the interests of various stakeholders, emphasizing passive measures of awareness and education above prescriptive measures.

Traffic Calming does not apply to collector roads since the primary function of collector roads is to move traffic efficiently from local roads to arterial roads. Collector roads are also routes for transit vehicles, emergency services, and large trucks. Traffic calming collector roads can create other problems, such as short-cutting through local residential roads. However, the City of Penticton will consider Traffic Calming on collector roads in front of elementary schools and in playground zones due to the presence of young children. Playground Areas will only be considered if they front local residential roads.

## Goal

The goal of the Transportation Safety Policy is to provide a process that addresses all traffic safety related issues in the City of Penticton. Specifically, the process outlined in this Policy forms a set of guidelines that will:

- Verify concerns are substantive and/or broadly held
- Encourage appropriate motorist, pedestrian, and cyclist behavior
- Promote a safer environment for motorists, pedestrians and cyclists
- Maintain a desirable quality of neighbourhood livability in Penticton

The policy strives to achieve this outcome by:

- Improving the understanding of drivers, pedestrians, cyclists and adjacent property owners of the realities of the Transportation Safety issue
- Designing and installing intersection improvements, traffic signals, signage, lane markings, pedestrian crossings, sidewalks, improving Sightlines, speed reduction measures and Traffic Calming works within the financial constraints of approved budgets
- Increasing police and Bylaw enforcement
- Educating road users about appropriate speeds and behavior on City streets
- Where possible, encouraging non-essential traffic to divert to the appropriate type routes.

## Definitions

Term	Definition
85 <sup>th</sup> Percentile	Speed at which 85 percent of the traffic is travelling at or below
Affected Area	Area that includes the street where the proposed changes are being made and adjacent streets if they are impacted by the proposed changes (ie. Elimination of a through route or streets whose primary access is directly off the affected street)
Affected Resident	The resident of a property that fronts or is adjacent to the street where traffic calming is being requested
City	The Corporation of the City of Penticton
Curb Extension	A horizontal intrusion of the curb into the roadway resulting in a narrower section of roadway
Intervention	A process of assessing and planning to remediate or prevent traffic related

	problems
Playground Area	A section of roadway adjacent to a playground that is denoted by Playground Area signage without a 30km/hr speed limit sign
Playground Zone	A section of roadway adjacent to a playground that is denoted by Playground Area signage and a 30km/hr speed limit sign
School Zone	A section of roadway adjacent to a school that is denoted by School Area signage and a 30km/hr speed limit sign
Shortcutting	The practice by motorists of using secondary roads or residential side streets instead of the intended main roads in urban areas in order to avoid heavy traffic or long delays at traffic signals
Sightline	The unobstructed line-of-sight between the road user (ie. driver, cyclist, pedestrian) and the road ahead
Traffic Calming	The combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior and improve conditions for non-motorized street users
Traffic Calming Measures	A physical device, regulation or action which affects the movement of motor vehicles, bicycles and/or pedestrians
Traffic Calming Plan	Describes measures to be used, where they are to be located, in what order and what times they will be implemented, and how the costs of the measures will be funded
Traffic Calming Petition Form	A form that must be filled out when requesting Traffic Calming on a local residential through road. The petition form is not necessary for Traffic Calming requests in front of elementary school or Playground Zones.
Traffic Consultant	A consulting firm (or individual) who has expertise in transportation engineering, specifically road geometry, sidewalks, crosswalks, traffic light and signs, road markings, cycling infrastructure, and Traffic Calming
Transportation Safety	To keep all transportation users (motorists, cyclists, pedestrians, and/or transit users) safe while using City streets, sidewalks, and bike lanes within Penticton
Transportation Safety/ Traffic Calming Request Form	A form that must be filled out and submitted by the initiator in order to have any request considered

## Implementation

The following flowchart, Figure 1, shows the process that shall be followed when faced with a traffic complaint. The process consists of 6 steps detailed below: Initial Screening, Problem Identification/Data Collection, Development of Traffic Calming/Transportation Safety Plan, Public Review of Traffic Calming, Detailed Design & Funding, and Construction.

### Step 1 Initial Screening

**Duration: 1 week**

Initiator completes Transportation Safety/Traffic Calming Request Form, Appendix A, and/or Traffic Calming Petition Form, Appendix B. A petition form is not necessary if requesting Traffic Calming in an Elementary School Zone or Playground Zone. A petition form is required when requesting Traffic Calming on a section of road in a Playground Area. City staff will then determine what the nature of concern is. If there is a simple solution to the issue, City Staff will implement the solution.



**Step 2 Problem Identification/Data Collection****Duration: 1-4 months**

City staff undertakes the appropriate initial data collection measures which can include:

- Installing a speed reader to collect speed and volume data
- Checking the ICBC collision database
- Contacting RCMP
- Contacting Bylaw
- Checking for previous similar complaints
- Performing a field check

After all data is collected, City staff will complete the Transportation Safety/Traffic Calming Review Form, Appendix C.

A decision will be made as to if there is an issue that needs to be addressed or if more data is required. The request form, petition (if applicable), and review form along with a note to file regarding an evaluation of the data collected will be completed and the initiator will be notified of the outcome. After a request has been denied, 24 months must expire from the date the decision was made before another request for the same street and nature will be considered.

For Traffic Calming Requests, the City will determine if street meets the criteria for traffic calming requirements as set out in Table 1, Criteria for Traffic Calming.

Table 1 – Criteria for Traffic Calming

Criterion	Measurement	Requirement
RCMP	Nature of complaints or concerns	RCMP confirms if the nature of concern is significant
Bylaw	Nature of complaints or concerns	Bylaw confirms if the nature of concern is significant
Collisions	Collision rate and severity of reported collisions (most recent data available)	Average collision rate per year must be greater than 2
Road	Classification of road as defined by current City of Penticton Road Classification Map	Road must be a local residential through road OR any section of road in an Elementary School Zone or Playground Zone
Speed	Vehicle speeds measured 24 hr/day for duration of 1 week minimum - School Zones 8am-5pm on school days - Playground Zones Dawn to Dusk on all days	The 85 <sup>th</sup> Percentile speed of daily traffic in both directions is $\geq 10$ km/hr over the posted speed limit
Volume	Daily traffic volume	$\geq 500$ vehicles per day in both directions
Safety	Effect on emergency services & transit vehicles	Negligible effect on provision of emergency services and transit vehicles
Support	Affected residents in support of plan	$\geq 24\%$ of affected residents should be in favor of the proposed plan



#### Summary of screening process:

- RCMP: If RCMP confirms the nature of concern is significant, no other criteria need to be met to continue to develop a plan for traffic calming.
- Bylaw: If Bylaw confirms the nature of concern is significant, no other criteria need to be met to continue to develop a plan for traffic calming.
- Collisions: If the average number of collisions per year exceeds 2, traffic calming may be considered without meeting the speed or volume criteria.
- Road, Speed, and Volume: If RCMP or Bylaw do not feel the nature of the concerns are significant and the Collision rate is below 2 per year, then all road, speed, and volume criteria must be met. Depending on the time of year traffic speed and volume data is collected, City Staff may apply a seasonal adjustment factor if required. The City may also consider installing the speed reader a second time to capture any seasonal effects on speed.
- Safety & Support: If the above criteria have been met, a traffic calming plan can be developed. The proposed plan must have a negligible effect on emergency services and transit vehicles and at least 24% of affected residents should support the plan.

If an issue is identified City staff will either address it immediately or will move on to Step 3A or 3B for further work. Any further data collection requirements will be addressed as part of Step 3A or 3B below.

#### **Step 3A      Develop Traffic Calming Plan**

**Duration: 2-8 months**

The Transportation Safety/Traffic Calming Review Form, Appendix C, will be sent out to a Traffic Consultant twice a year to review and develop a Traffic Calming Plan and cost estimate. The Traffic Consultant will maintain an updated prioritized list of all Traffic Calming projects.

As part of the plan development, City Staff or the Traffic Consultant will consult with stakeholders such as adjacent land owners, cycling associations, emergency vehicles, transit, public works, and transportation advisory groups.

If a Traffic Calming project falls under a neighborhood-wide Traffic Calming Plan in the future, City Staff will determine if the project should be constructed as is or be re-evaluated as an entire neighborhood Traffic Calming Plan.

#### **Step 3B      Develop Transportation Safety Plan**

**Duration: 2-8 months**

Most Transportation Safety requests will be addressed by City staff unless there is a requirement for a warrant analysis, in which the Transportation Safety/Traffic Calming Review Form, Appendix C, will be sent out to a Traffic Consultant twice a year to develop a Transportation Safety Plan for each request. The Traffic Consultant will maintain an updated prioritized list of all Transportation Safety projects.

As part of the plan development, City Staff or the Traffic Consultant will, as required, consult with stakeholders such as adjacent land owners, cycling associations, emergency vehicles, transit, public works, and transportation advisory groups.

#### **Step 4      Public Review of Traffic Calming**

**Duration: 1 month**

The City will hold a public consultation and conduct a survey of Affected Residents as well as residents that live in the Affected Area. There will be many mechanisms made available for residents to fill out a survey such as attending a meeting, mail out, pick up or online.

Traffic Calming requests for roads in Elementary School Zones or Playground Zones are exempt from this criterion. Playground Areas are not exempt from the public review process. Transportation Safety Plans will not go through the public review process unless the plan significantly affects nearby residents.

The City will move to Step 5, Detailed Design & Funding, if at least 40% of the residents in the affected area complete the survey and at least 60% of the survey respondents support the proposed Traffic Calming Plan.

#### **Step 5      Detailed Design & Funding**

**Duration: 1-2 months**

Depending on budget available, develop construction plans of the highest priority Transportation Safety and Traffic Calming projects for current year. The remainder of the projects will be kept on a continuously updated priority list for future consideration.

#### **Step 6      Construction**

**Duration: 2-24 months**

Install Transportation Safety or Traffic Calming Measures.

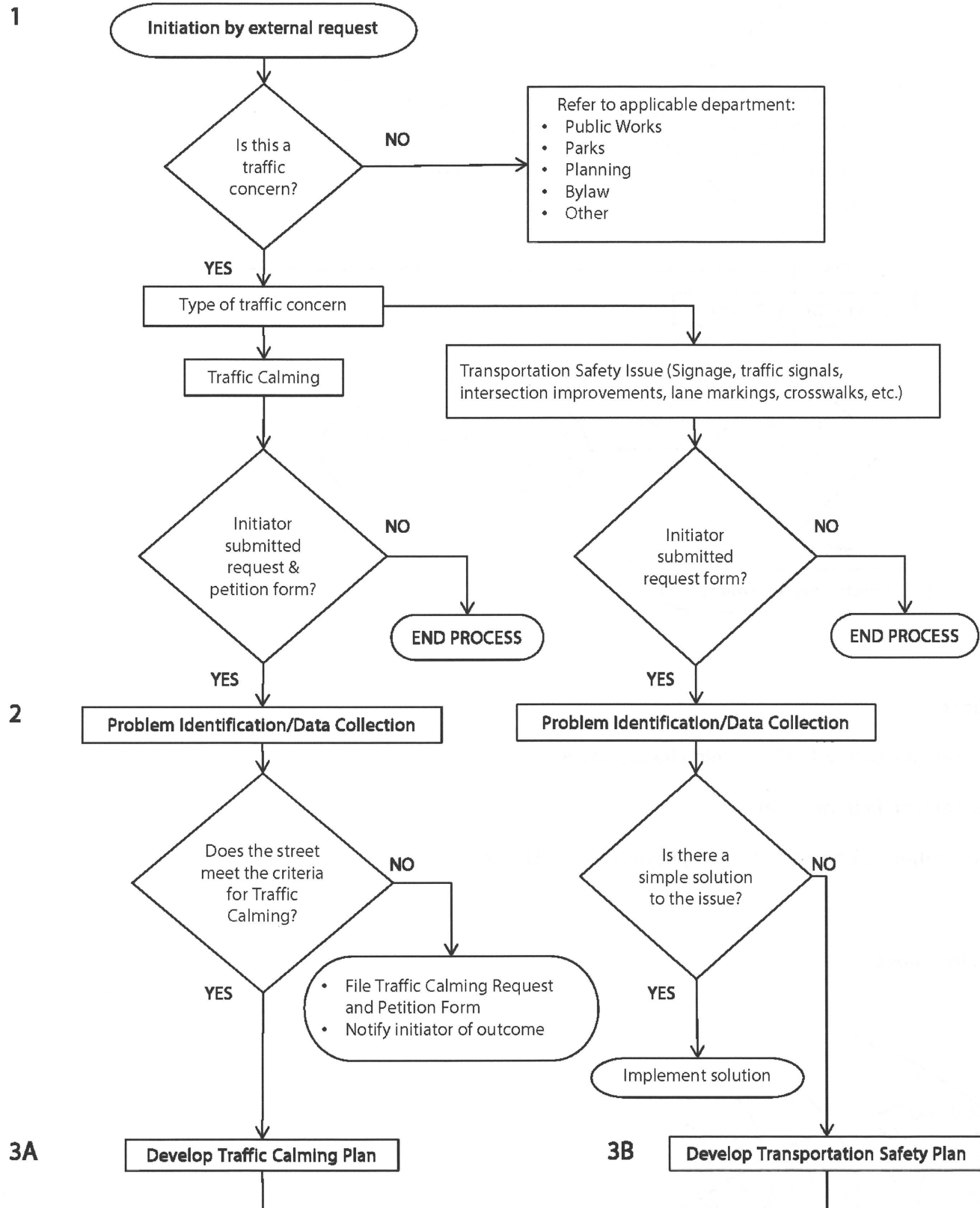
Consultation with effective communication is essential to the successful implementation of the Policy. Most Transportation Safety issues will be resolved by City Staff; however, consultation may be required for issues that require a warrant analysis, such as an intersection or proposed pedestrian crossing.

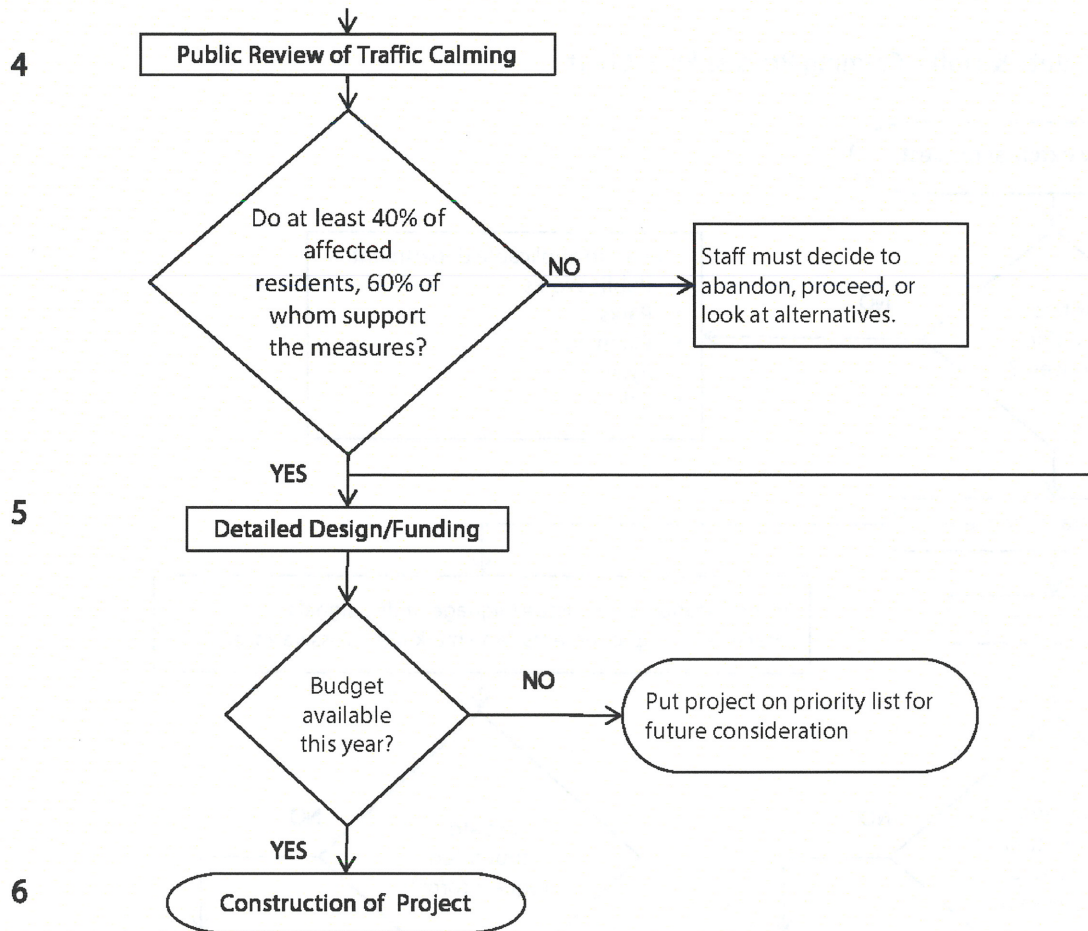
Traffic Calming initiatives can consume resources and become contentious issues. At the outset it should be verified that there are substantive and broadly held concerns. All stakeholders should be consulted, where practical, and if possible, a high degree of consensus reached on a solution. Passive measures of enforcement and education are recommended before engineering alternatives are implemented.

If practical, Traffic Calming Plans should be implemented on a trial basis, which should include testing under winter conditions. Engineering measures should be based on the **Canadian Guide to Neighborhood Traffic Calming** (1998 or most recent update) jointly published by the Transportation Association of Canada and the Canadian Institute of Transportation Engineers.



Figure 1 – Transportation Safety & Traffic Calming Process Flow Chart





## Appendices

A – Transportation Safety/Traffic Calming Request Form

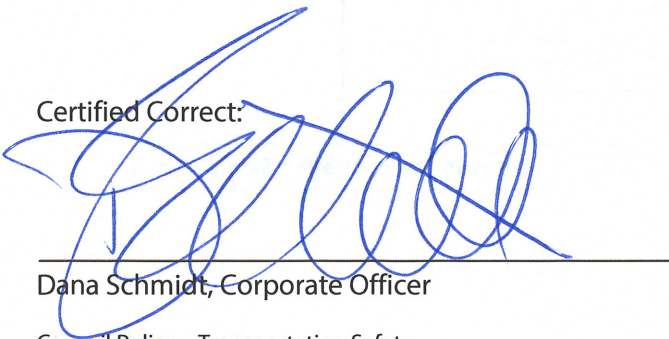
B – Traffic Calming Petition Form

C – Transportation Safety/Traffic Calming Review Form - Example

## Previous Revisions

None

Certified Correct:

  
Dana Schmidt, Corporate Officer

Council Policy – Transportation Safety



## Transportation Safety/Traffic Calming Request Form

penticton.ca

**Transportation Safety/Traffic Calming Request Form**

This form is used to report any traffic concerns. All Traffic Calming requests must be submitted with a completed Traffic Calming Petition Form. City Staff will evaluate the complaint and determine whether or not to proceed with a Traffic Study. Please provide your contact information in order to have your request considered.

**Primary Contact Information**

Name

Email Address

Phone Number

Street Address &amp; Postal Code

Have you read our "Transportation Safety Policy"?

☐ Yes☐ No**Specify the Location and Concerns**

1. Describe the location of the traffic concern:

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2. Types of problems. Check all that apply:

☐ Pedestrian Safety☐ Other safety (cyclists, motorists)☐ Parking☐ Speeding Vehicles☐ Shortcutting Traffic☐ Other problems

3. Describe the nature of the traffic problem you are concerned with:

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4. Does the problem occur during all seasons?

☐ Yes      ☐ No

If no, in which season(s) is the problem occurring?

☐ Winter      ☐ Summer      ☐ Spring      ☐ Fall

5. Does the problem occur during specific times of the day?

☐ Yes      ☐ No      If yes, specify the time(s) of day:

6. Does the problem occur during specific days of the week?

☐ Yes      ☐ No      If yes, specify the day(s):

7. List any possible solutions to the problem that you would like the City of Penticton to consider:

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Thank you for taking the time to fill out this form.

Send your completed Transportation Safety/Traffic Calming Request Form (and Traffic Calming Petition Form for all Traffic Calming requests) to [engineering@penticton.ca](mailto:engineering@penticton.ca) or by fax to 250 490 2557. Forms can also be dropped off in person at the City Yards or mailed to:

Engineering Department  
616 Okanagan Ave East  
Penticton, BC V2A 3K6





## Traffic Calming Petition Form

penticton.ca

## Traffic Calming Petition Form

We, the undersigned, as residents, request the evaluation of the Traffic Calming request listed on the attached request form. Only one signature per address and at least 10 signatures are required. It is not necessary to file a petition if requesting Traffic Calming in an Elementary School Zone or Playground Zone.

Name (print)	Address	Phone Number	Signature
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

Send your completed Transportation Safety/Traffic Calming Request Form & Traffic Calming Petition Form to [engineering@penticton.ca](mailto:engineering@penticton.ca) or by fax to 250 490 2557. Forms can also be dropped off in person at the City Yards or mailed to:

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Penticton, BC V2A 3K6

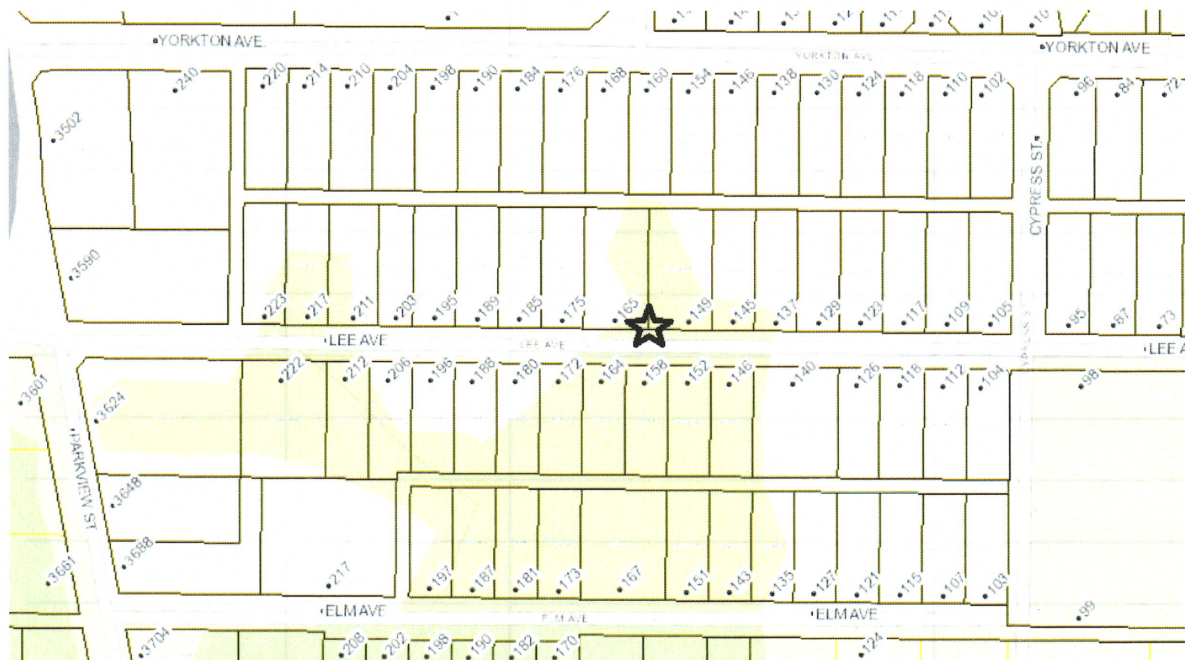


## Transportation Safety/Traffic Calming Review Form

**Location:** Lee Avenue between Parkview Street and Cypress Street

**Road Classification:** Local Residential

**Map:**



(Star indicates location of speed reader)

**Previous History:**

Stats from ICBC Collision Database (2009-2013):

Street	Crossing Street	Number of Accidents
Lee Avenue	Skaha Lake Road	1
Lee Avenue	Mid-Block	2
Lee Avenue	Cypress Street	2
Lee Avenue	South Main Street	4
<b>Total Accidents</b>		<b>9</b>

Average per year:  $9/5 = 1.8 < 2$  and therefore does not meet the collision criterion.

Council Policy – Transportation Safety



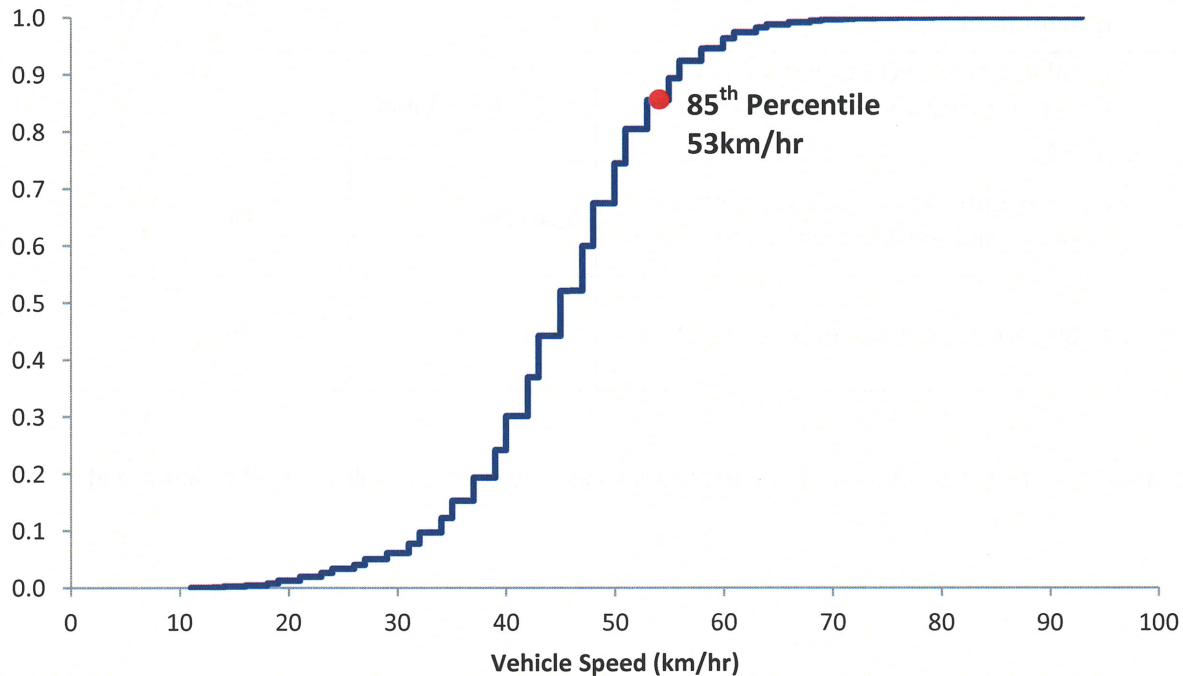
**Comments from RCMP:** None

**Comments from Bylaw:** April 27, 2015 – complainant reported vehicles parked on north side of Lee Ave were obstructing sight lines of South Main St & Lee Ave intersection. Bylaw confirmed there were no issues.

**Similar Previous Complaints:** None

**Comments from Site Visit:** None

**Traffic Speeds:**



The posted speed limit on Lee Ave is 50km/hr. To meet the speed criterion, the 85<sup>th</sup> Percentile speed of 60km/hr is required. The 85<sup>th</sup> Percentile speed on Lee Ave is 53km/hr and therefore does not meet the speed criterion.

**Traffic Volumes:**

Day	Date	Number of Vehicles
Tuesday	July 21, 2015	2420
Wednesday	July 22, 2015	2364
Thursday	July 23, 2015	2406
Friday	July 24, 2015	2236
Saturday	July 25, 2015	2170
Sunday	July 26, 2015	1951
Monday	July 27, 2015	2221
Tuesday	July 28, 2015	2522
Wednesday	July 29, 2015	2547
Average		2315

## Summary

Criterion	Requirement	Lee Ave	Criterion Met?
RCMP	RCMP confirms if the nature of concern is significant	Not significant	No
Bylaw	Bylaw confirms if the nature of concern is significant	Not significant	No
Collisions	Average collision rate per year must be greater than 2	1.8	No
Road	Local Residential <b>OR</b> Collector in an Elementary School Zone or Playground Zone	Local Residential	Yes
Speed	85 <sup>th</sup> Percentile speed of daily traffic is 10km/hr higher than posted speed limit	53km/hr	No
Volume	≥500 vehicles per day in both directions	2315	Yes

Based on the speed data collected and criteria in the above table, Lee Ave is not eligible for traffic calming at this time.