Traffic Calming for Burritt's Rapids



Presented to the Committee of the Whole, Leeds & Grenville by the Burritt's Rapids Community Association

July 3 rd, 2018



✤ Who are We

- Current State & Problem Definition
- Our Traffic Calming Journey
- Our Request

Burritt's Rapids Community Association

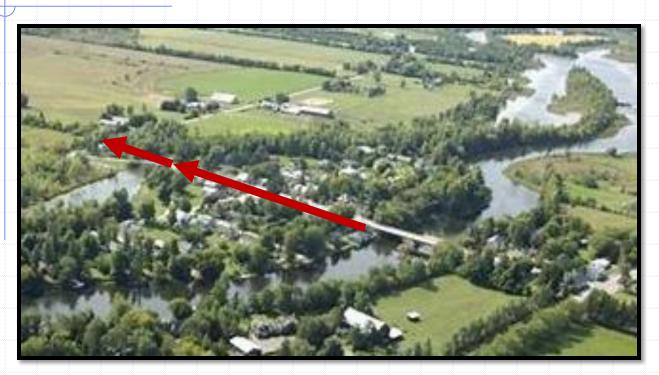
- Since 1935
- Non-profit, Charitable organization
- Volunteer Board of Trustees; no staff
- Mandate:
 - Manage and maintain historically designated Community Hall (which is owned by the Community)
 - Enable community-led projects and events
 - Single point of contact (Parks Canada, North Grenville, Leeds & Grenville, City of Ottawa, etc)
- One of our Principles:
 - Enable change to occur within the Hamlet in a planned and cohesive manner

Burritt's Rapids Community Association

Accomplishments:

- Management of Community Hall Circa 1842
- Greening Team: Community Gardens !!
 - Hall, Library, Park, Bridges
 - Monarch Way Station
- Parks Canada Trail Signage
- Public Benches (5)
- Play ground equipment
- Historic Walking Tour Brochure

Grenville Street & Burritt's Ave



Several stakeholders involved with our community streetscapes:

- Grenville Street
- Sidewalks on Grenville St.
 <u>North Grenville</u>
- Fixed bridge and Burritt's Ave <u>City of Ottawa</u>
- Swing Bridge

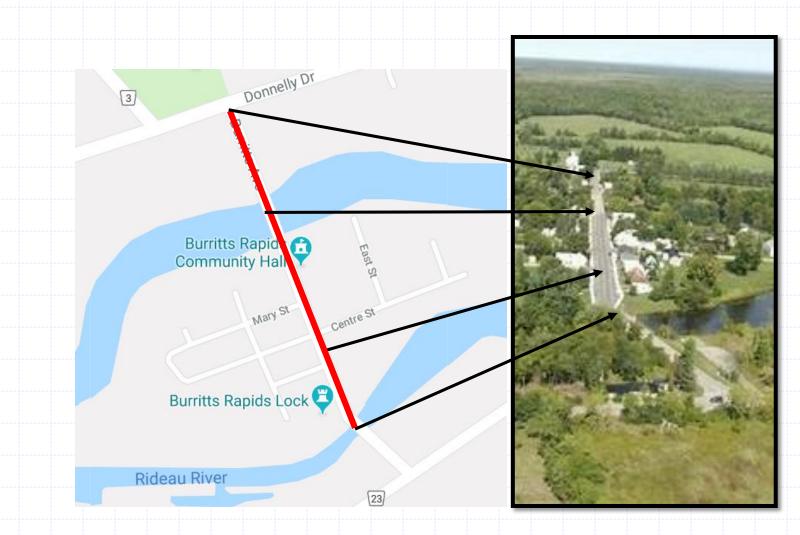
- Leeds & Grenville

- Parks Canada

Burritt's Rapids - Grenville Street

CURRENT STATE

♦ Within 400 m total length: Single Lane bridge → visual 4-lane race track → 2 lane bridge → stop sign



Burritt's Rapids - Grenville Street

Posted Limit on street: 50 km/hr

Posted Limit at Swing Bridge: 10 km/hr



Speed differential of 40 km/hr is unusual and dangerous.

There have been two fatalities at the Swing bridge, where the 50 km/hr becomes 10 km/hr

Problem Definition

Annual General Meeting – Nov 2014

- Community discussion and alignment to a problem statement and solution objectives (see next slide)
- Board of Trustees received overwhelming support to pursue traffic calming measures

Problem Definition

Excessive Speed

- Community Safety
- Noise

Over-weight vehicles

- Swing Bridge safety
- Swing Bridge maintenance

Traffic Visibility

- Burritt's & Donnelly
- Mary & Grenville
- Center and Grenville

Speed solution may discourage large vehicles

BRCA AGM 2014

Speed solution may enable safer traffic flow

Objectives

- Implement appropriate Traffic Calming measure(s) to reduce the speed of vehicles travelling along Grenville Street
- Such measures need to:
 - Ensure pedestrian safety
 - Minimize noise
 - Maintain parking spaces
 - Be aesthetically pleasing



- OUR JOURNEY
- Annual General Meeting Nov 2014
 - Community discussion and alignment to a problem statement and solution objectives
 - Board of Trustees received overwhelming support to pursue traffic calming measures

Jan 2015- Nov 2016

- Multiple discussions and data gathering with Les Shepherd, Leeds
 - & Grenville Director of Public Works
 - Speed studies, traffic counts, etc
 - Electronic speed warning signs
- Several ideas proposed and reviewed for input and feedback:
 - Center islands; round-abouts; stop signs
 - Speed Humps; center strip flags
 - Planters; curb extensions



Community Vision Exercise May 2016

- Commissioned by North Grenville upon Community request
- More than 70% participation
- Under "Change & Improve"
 - 6 references to traffic calming

Burritt's Rapids Visioning Exercise

5.1.3 What are some of the things you would like to see changed or improved?

o e	Speed bumps (√√)	Reclaim the stairs going down to the river next to the bridge $(\sqrt{3})$
	Natural gas (√√) – Yes along Northside of the river as well	Buried hydro lines (√√)
	Remove or repair crumbling sidewalk (√)	Sentic system (v)
	Narrow road on East side (1)	Speed limits (√) for the cars passing by and more signs (x)
	Full community consultation before approv land-use, new zoning and sub-divisions	als for energy plan developments and
	Flashing light at north intersection	Natural gas
	Traffic calming (village and CR 2 – Donnellv)	Cut more weeds/sea weed at the beach and add more sand
	Make Centre Street East match Centre Street West (width, shoulders)	Floodlight on the canal for skating
	Install a single east-west sidewalk in the village	Clean up the beach
	Commercial growth	Speed bumps
	Protect and enhance water quality in river and canal and local up-stream tributaries Policies take into consideration scientific predictions resulting from Climate Change	Enforcement of residential property standards particularly people who accumulate excessive amounts of junk!
	Reduce the volume of pass through traffic on island, River Road and Donnelly/Dwyer Hill	Too much traffic (not Burritt's Rapids residents) travelling too fast on Grenville Street Every Day!
		More gardens
What a	Replace dotted white line leading into the interception of Donnelly and Grenville with a double	Encourage homeowners to hide propane tanks (especially from sidewalks)
	Better park facilities for children and teens	Lower asphalt to prevent basement flooding (v)



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- OUR JOURNEY
- Annual General Meeting Nov 2014
 - Board of Trustees completed research and gave presentation to community members, receiving majority support to pursue traffic calming measures
- Jan 2015- Nov 2016
 - Multiple Discussions with Les Shepherd, Leeds & Grenville

Annual General Meeting – Nov 2016

- Les Shepherd & Melanie Knowles presented a proposal to install speed humps
- Unanimous support, once questions were addressed

Meeting with A. Mukherjee in BR – October 2017

- 3 Community members present
- Mr. Mukherjee had not been briefed about Mr. Shepherd's commitment to the Community
- Expressed lack of` support for speed humps, but agreed to redo traffic studies and review previous findings

Meeting with A. Mukherjee in BR – May 2018

- 4 Board members present + NG Councillor
- Mr. Mukherjee proposed to install Stop Signs, to create an "allway stop" intersection
 - Board members expressed concerns, but at the NG Councillor's suggestion, agreed to share with Community for feedback

Traffic Calming Status

- Proposal shared with community June 2018
 - Have received limited feedback in short period of time
 - Concerns and questions have been raised about:
 - Perceived 'sudden' change in direction
 - Whether a stop sign is warranted; safety; noise implications
 - Opportunities for 'better' solutions
 - Lack of "big picture" planning
 - Clarity of Parks Canada modifications re: swing bridge

- NOTES:
 - there are several new residents over the last 2 years and two families with small children are now living directly on Grenville street
 - Additional research indicates that an 'unwarranted' stop sign is likely to do more harm than good, and should NOT be used as a traffic calming device (see "References" section at the end of this deck)

Stake-holders

Parks Canada:

- Additional bridge signage is planned
- Changes to road approach to swing bridge
- Elimination of parking on the west side of road
- Angled parking on east side of road
- UNESCO sight lines??

North Grenville:

- Road standards plan for hamlet side streets, which could alter the road widths
- Has money earmarked for Burritts Rapids road improvements

Other Options

A community member proposed to install curb extensions

- No additional noise concerns; safer pedestrian crossings
- Greening would be managed by Greening team





Other Options

Planters!

OUR JOURNEY

- Relatively inexpensive
- Move-able and easily Re-moveable!
- BRCA would commit to seasonal planting, care & watering



Community Request of Council

- The BRCA, on behalf of the residents of Burritt's Rapids, respectfully asks Council to give a mandate to staff to participate in broader consultation to resolve traffic issues, in such a way that:
 - Enables open dialogue with residents
 - Involves all stakeholders (esp Parks Canada and North Grenville)
 - Examines a range of potential traffic calming options
 - Identifies the best solution within the context of a Village Plan



REFERENCES & RESEARCH

Canadian Guide to Neighbourhood Traffic Calming

Community Involvement is Critical

"Traffic calming plans should be developed in consultation with the community. In some cases, "solutions" to traffic problems have been developed without sufficient input from the community, and as a result have generated opposition which ultimately prevented the solutions from being implemented, or resulted in the solutions being removed. In many cases, opposition arose not because the solutions were ineffective but because they were not what the community wanted."

Burritt's Rapids Vision



Municipality of North Grenville Burritt's Rapids Visioning Exercise Draft Report

Prepared by:



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BR Speed Management

Presented at the Nov 2016 AGM for the BRCA

Les Shepherd



Burritts Rapids Speed Management

November 30, 2016



City of Ottawa: Road Corridor Planning & Design Guidelines

(page 17)

Planning & Design Guidelines for Corridor Components

Provide wider lanes in the range of 3.5 to 4.25m for

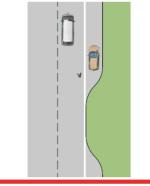
2. Provide bump-outs to define road segments with fulltime on-road parking. Bump-outs delineate vehicle lanes, calm traffic speeds, reduce pedestrian crossing distances, and to provide space for tree planting, street furniture, transit stops and bicycle parking between the vehicle lanes and the sidewalk.

> lector Roads if used appropriately. However, provision of excessive space for on-road parking may result in situations where more parking is provided than is required. This leads to unnecessary pavement width, where space could be better used for road-edge functions such as landscaping, sidewalks, etc., or where the ROW width could be reduced.

> Provide on-road parking on roads with land uses that are directly accessible from the corridor. This will calm traffic, separate pedestrians from traffic, and promote corridor-oriented community activity.

- Provide bump-outs to define road segments with full time on-road parking. Bump-outs delineate vehicle lanes, calm traffic speeds, reduce pedestrian crossing distances, and to provide space for tree planting, street furniture, transit stops and bicycle parking between the vehicle lanes and the sidewalk.
- In road retrofits using bump-outs to create a parking lane, use paint striping along the parking lane to announce and delineate the new use of the road surface.
- 4. In areas with lower parking demands, such as along natural areas or in lower density single detached housing areas, consider on-road parking on one side of the street only to reduce pavement width. Alternate the single parking lane from one side to the other along the street so that the benefits of additional landscaping can be shared among both sides.
- 5. Plant trees in bump-out areas where appropriate. If not, construct the sub-grade to the same standard as under the road pavement to maintain the structural integrity of the roadway and reduce future maintenance or re-construction costs. This also allows the bump-out area to be easily converted to travel lanes or parking if ever appropriate.
- Construct on-road parking lanes 2.5m wide, with 2.25m acceptable in constrained areas or on lower





Use Bump-outs at corners or at the middle of long blocks to define the parking lane and calm traffic.

City of London: Traffic Calming Policy for Existing Neighborhoods

"all-way stops should not be used as a tool to calm traffic"

City of London - Traffic Calming Program

1.4 What is NOT Traffic Calming

Over the past 30 years there has been a significant amount of knowledge gained through the implementation of successful projects to determine what traffic calming measures work and which traffic calming measures are not effective. The all way stop, 40 km/hr reduced speed zone, children at play signs, posted speed signs, rumble strips and speed bumps are all devices commonly mistaken for being traffic calming tools. None of these devices works to calm traffic for the reasons listed below:

Unwarranted All Way Stop

- Creates higher traffic speeds between stop signs. Studies have determined the speed is only reduced for 100 m on either side of the intersection.
- Results in poor compliance with stop signs due to driver frustration, as low as 1% in some studies in the City of London.
- Results in more frequent rear-end collisions caused by low percentage of motorists who actually do come to a complete stop.
- Requires frequent police enforcement as motorists do not stop, a drain on manpower resource.
- Potential risk to pedestrians especially children and seniors crossing an intersection, since not all motorists approaching an intersection will stop.
- Motorists get in the habit of stopping at unwarranted all-way stop locations, than assume at a 2 way stop cross traffic is going to stop and pull out in front of an opposing vehicle which results in a collision.

In light of the above, all-way stops should not be used as a tool to calm traffic. There are established criteria for all-way stop control based upon the numbers of pedestrians and vehicles sharing an intersection, the collision history and visibility. When these criteria are followed, risks are minimized and new safety concerns are not created. There have been numerous studies completed in North America which have validated all of the above findings.

City of Kingston – Traffic Calming Policy 2007 Appendix 'C'

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"Safety of pedestrians is decreased at unwarranted multi-way stops, especially small children"

All-Way Stop Control

The Transportation Department receives a significant number of requests for all-way stop signs to be installed at intersections throughout the City as a traffic calming measure. The *Canadian Guide to Neighbourhood Traffic Calming* states the following with respect to the use of stop signs for traffic calming purposes:

"Stop signs used as a traffic calming measure may not be effective and may create compliance problems."

A recent study completed by W.Martin Bretherton, a traffic engineer in Georgia, USA, reviewed over 70 technical papers regarding all-way stops and their success and failure as traffic control devices in residential areas. Mr.Bretherton states the following in this study:

"The research found that, overwhelmingly, multi-way stop signs do NOT control speed except under very limited conditions. The research shows that the concerns about unwarranted stop signs are well founded"

One of the most serious issues discussed by Mr.Bretherton with respect to unwarranted op signs is related to pedestrian safety.

"Safety of pedestrians is decreased at unwarranted multi-way stops, especially small children. It seems that pedestrians expect vehicles to stop at the stop signs but many vehicles have gotten in the habit of running the "unnecessary" stop sign".

Institute of Transportation Engineers

On the use of Curb Extensions:

APPLICATION

- local and collector streets
- pedestrian crossings
- main roads through small communities
- work well with speed humps, speed tables
- provides opportunity for landscaping

IMPACTS

- can impact parking
- increases visibility of pedestrian
- Cyclists may feel forced to share the roadway
- markers are often used to make visible to snowplow operators
- Preferred by emergency response (vs. speed humps)