# CITY OF VANCOUVER



Report Date:March 28, 2008Author:Sylvia KirkPhone No.:604.873.7908RTS No.:7140VanRIMS No.:13-5000-10Meeting Date:April 15, 2008

TO: Standing Committee on Transportation and Traffic

FROM: General Manager of Engineering Services

SUBJECT: Annual Speed Hump Installation Program, 2008

# RECOMMENDATION

- A. THAT speed humps be installed on the local residential street segments specified in this report subject to approval from a resident survey, with funding of \$184,000 from Engineering Streets Capital Budget 2007 Neighbourhood Traffic Calming,
- B. THAT commencing in 2009, the Traffic Operating Budget be increased by \$5,000 without offset, subject to annual Budget Review.

## COUNCIL POLICY

In November 1999, Council approved an annual speed hump installation program that would identify the highest ranking local residential street segments for speed hump installation. In February 2008 Council approved a revised ranking system for the Speed Hump Program.

## PURPOSE

This report seeks approval and funding for the 2008 Annual Speed Hump Installation Program. It identifies the proposed speed hump locations and outlines a method for public consultation.

## BACKGROUND

In 1999 the City completed the Speed Hump Pilot Project. The results of that project indicated that speed humps are an effective device for decreasing speeds on local residential streets while not diverting traffic to other streets. In the subsequent eight years, Council has approved the installation of speed humps on over 200 street segments throughout the city.

Prior to and following the installation of speed humps in 2001, traffic was monitored on the street segments which received speed humps, as well as on adjacent streets. In every location where speed humps were installed, speeds were reduced. A typical school or playground zone which previously had an 85<sup>th</sup> percentile speed over 50 km/h has seen this reduced to between 30 and 40 km/h. Residential streets which had 85<sup>th</sup> percentile speeds over 60 km/h now experience speeds between 40 and 50 km/h.

Diversion of traffic to adjacent residential streets is often a concern when implementing traffic calming measures. Traffic data collected before and after the installation of speed humps in 2001 shows that, in the vast majority of applications, speed humps produce no appreciable diversion of traffic to adjacent streets.

The process for selecting the eligible street segments for speed humps involves identifying priority locations using resident feedback and traffic data, conducting a follow up speed check at the location in question and using an objective ranking system. City Council has approved a revised ranking system in February 2008 which gives a greater weight to higher speeds relative to higher traffic volumes which better addresses the issues for use by the annual Speed Hump Program.

## DISCUSSION

Twenty-three street segments are recommended for speed hump installation this year. Of these segments, 10 are adjacent to parks, 13 are in school zones, and 4 are on bikeways. All segments are in 30 km/h school or playground zones. Table 1 lists the street segments with information about their ranking and the approximate number of humps to be installed.

Experience shows that speed humps rarely produce significant diversion of traffic to adjacent streets. However, staff recommend that traffic volumes be monitored before and, where diversion of traffic is suspected, after the installation of speed humps.

Hundred	Street	Posted	85 <sup>th</sup>	Traffic	Est. No.
Block	Segment	Speed	Percentile	Volume	Speed
	-	Limit	Speed	(Veh/day)	Humps
		Km/h	Km/h		
3600	Moscrop, Joyce to Boundary	30	53	900	3
3600	Ash, W 20 <sup>th</sup> to W 21 <sup>st</sup>	30	52	700	2
6500-6900	Argyle, E 49 <sup>th</sup> to E 55 <sup>th</sup>	30	55	1200	4
2000	Wall, Oxford to Dundas	30	52	900	1
1000	E 45 <sup>th</sup> , Windsor to Ross	30	48	1900	3
5400	Melbourne, Euclid to Foster	30	47	600	2
1800	Penticton, E 2 <sup>nd</sup> to E 3 <sup>rd</sup>	30	45	900	2
2000	Waterloo, W 4 <sup>th</sup> to W 5 <sup>th</sup>	30	46	1300	1
7300-7400	Ross, E 57 <sup>th</sup> to E 59 <sup>th</sup>	30	45	1400	4
1700	W 15 <sup>th</sup> , Burrard to Pine	30	45	400	3
3200-3400	Mackenzie, W 16 <sup>th</sup> to W 19 <sup>th</sup>	30	44	800	4
3000	Garden, Grandview Hwy to E 18 <sup>th</sup>	30	46	400	2
6100-6200	Cypress, W 45 <sup>th</sup> to W 47 <sup>th</sup>	30	42	1100	3
1400-1500	William, McLean to Cotton	30	42	1100	3
2100	E 10 <sup>th</sup> , Lakewood to Templeton	30	44	1300	2
500	W 20 <sup>th</sup> , Ash to Tupper	30	41	1000	3
500	W 21 <sup>st</sup> , Ash to Tupper	30	40	800	3
1800	Slocan, E 2 <sup>nd</sup> to E 3 <sup>rd</sup>	30	43	600	2
5400-5500	Aberdeen, Euclid to Kingsway	30	43	800	2
3200-3400	Balaclava, W 16 <sup>th</sup> to W 19 <sup>th</sup>	30	42	700	4
500	Jackson, Pender to Keefer	30	45	600	2
2200	Bayswater, W 6 <sup>th</sup> to W 7 <sup>th</sup>	30	43	1200	4
3900	W 14 <sup>th</sup> , Crown to Wallace	30	42	800	3

Table 1: Proposed Speed Hump Locations, 2008

Resident consultation and subsequent approval is an important part of the Speed Hump program. Staff propose that all residents living on the same street segments as the proposed speed humps be surveyed for their opinions. The surveys would ask two questions about whether the residents are concerned about a speeding problem on their street and whether they approve of speed humps. Installation of speed humps on each street segment will be subject to a survey response rate greater than 30% and an approval rate greater than 50%. Staff recommend that speed humps be installed on all of the proposed streets that meet these criteria and that staff report back on any locations that do not for further consideration.

Of the more than 200 street segments which were surveyed as part of the 2000 through 2007 Speed Hump Programs, seven did not receive resident support for the installation of speed humps. In 2007, there were 3 locations where the grades were too steep for speed hump installation (greater than 8 percent slope) so speed humps were not constructed at these locations and other non diversionary traffic calming measures will be explored. The labour dispute in 2007 has delayed the installation of these humps and other measures until 2008.

It is anticipated that the outstanding works from the 2007 program and the new locations identified in this year's program will be completed over the next 12 months.

#### FINANCIAL IMPLICATIONS

The estimated capital cost of installing speed humps, as specified in this report, is \$184,000 for the 23 proposed locations. This includes the construction of the asphalt humps, road markings on the asphalt humps, signage, traffic monitoring, and public consultation. This Funding is to be provided from the Engineering Streets Capital Budget - 2007 Neighbourhood Traffic Calming.

In addition to the capital costs for this project there will be maintenance costs associated with the signing and road marking of the speed humps. Staff recommend that commencing in 2009 the Traffic Operating Budget be increased by \$5,000 per annum, without offset, subject to annual Budget Review.

#### CONCLUSION

Speed humps are an effective means by which to reduce vehicle speeds on local streets. The locations identified in this report are the highest priority locations, in accordance with the ranking system approved by Council in February 2008. Staff recommend that speed humps be installed in 23 locations, subject to resident approval. Staff will report back on any locations that are not approved by the survey and will monitor traffic on street segments where appropriate.

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