LOWER SPEED LIMITS IN SUBURBAN SHOPPING CENTRES

1. Purpose of Report

To seek the Committee’s approval in principle to lowering the speed limit in a number of suburban shopping centres and to carry out consultation with stakeholders including local residents and businesses.

2. Executive Summary

For a number of years there have been requests from local communities, schools, businesses, police and residents associations, for a reduction in the speed limit through suburban shopping centres. In line with Council’s Walking and Cycling Policies which were adopted in November 2008 and the current SaferRoads programme, officers have developed a proposal using New Zealand Transport Agency criteria, to lower the speed limits in a number of suburban shopping centres to 30km/h, with a four year implementation programme. It is expected that by lowering the speed limits in certain suburban shopping areas will enhance safety for vulnerable road users, reduce the severity of crashes and reduce pollution which will create a more pleasant shopping and business environment.

Approval in principle to the proposal is sought together with agreement to carry out public consultation and report back to Committee.

3. Recommendations

Officers recommend that the Committee:

1. Receive the information.

2. Agree in principle to lowering the speed limit in the following suburban shopping centres:

- Aro Valley
- Berhampore
- Brooklyn
- Hataitai
- Island Bay
- Johnsonville
- Karori
- Kelburn
- Khandallah
- Kilbirnie
- Linden
- Marsden Village
- Miramar
- Newlands
- Ngaio
- Northland
- Seatoun
- Strathmore
- Tawa
- Tinakori shops
- Wadestown
3. Agree that officers carry out consultation with the affected communities in accordance with the Wellington Consolidated Bylaw 2008 – Part 6 Speed Limits and report back to the Committee on the results of the consultation

4. Background

4.1 Setting speed limits

In February 2003, the Government introduced the Land Transport Rule: Setting of Speed Limits (2003) (Rule). This Rule allows road controlling authorities to set enforceable speed limits, including permanent speed limits less than 50km/h, on roads within their jurisdiction.

In October 2004, a new Speed Limits Bylaw was approved by the Council. This was a requirement under the Rule and allows the Council to make amendments to speed limits by way of resolution on all roads under its control and in certain designated locations specified in the Speed Limits Bylaw.

4.2 Process

The process to change speed limits is defined in the Rule and the Speed Limits Bylaw. In summary, the process requires the following:

- A review of the areas to determine the suitability of the proposed speed limits
- Consultation with affected parties and stakeholders
- Formal adoption by the road controlling authority and notification of the changes before the new limits take effect.

5. Discussion

5.1 Lowered speed limits in Wellington

Over the past four years speed limits have been lowered on a number of roads to achieve more appropriate speeds on these roads and to acknowledge long standing local concerns as follows:

- Lambton Quay/Willis Street (lowered to 30km/h)
- Rural roads in Makara, Ohariu Valley and Glenside (lowered to 50km/h & 60km/h)
- Rural section of Middleton Road (lowered to 50km/h & 70km/h)
- Happy Valley Road and Ohiro Road (lowered to 50km/h)
- Takapu Road (lowered to 70km/h)
- Hutt Road (lowered to 60km/h & 80km/h)
Newtown – including 33 residential streets and the Riddiford Street shopping area (lowered to 40km/h).

Although it is too soon to determine long term crash trends resulting from these speed limit changes, initial evidence shows as follows:

- A reduction in the severity of crashes that have occurred along the 30km/h section of Willis Street and Lambton Quay.
- A reduction in crashes on Middleton Road from an average of eight crashes per year to three per year.
- Reductions in speed to safer and more appropriate levels have occurred along Hutt Road, Takapu Road and Ohiro Road.
- In Newtown, surveys show a reduction in speeds as per the following table:

<table>
<thead>
<tr>
<th>Street</th>
<th>2006 Average speed (km/h)</th>
<th>2009 Average speed (km/h)</th>
<th>Reduction in average speed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riddiford Street</td>
<td>35.2</td>
<td>30.2</td>
<td>-14.2</td>
</tr>
<tr>
<td>Daniell Street</td>
<td>39</td>
<td>30</td>
<td>-23</td>
</tr>
<tr>
<td>Mein Street</td>
<td>37.2</td>
<td>35</td>
<td>-5.9</td>
</tr>
<tr>
<td>Owen Street</td>
<td>20.7</td>
<td>19</td>
<td>-8.2</td>
</tr>
</tbody>
</table>

5.2 Community concerns

Public concerns over road safety are one of the primary factors that have reduced the level of walking and cycling in areas where speed limits have been set too high. Our experience is that communities feel strongly about vehicle speeds within residential and shopping areas, where there are often high levels of pedestrian activity.

Reducing speed limits in the specified local areas will create a safer and more pleasant public street environment which is consistent with the Council’s strategic outcome – 2.5 Safer – Wellington will seek to improve the safety and security of its citizens as they move around the City and region.

5.3 Lowering the operating speed as a critical tool

The safest environment for all road users is when operating speeds are compatible with that environment, for example in a predominantly pedestrian area, speeds need to be matched to the needs of the pedestrian. A combination of tools is required to achieve this, including the lowering of speed limits and traffic calming measures.
The number of traffic injuries and their severity are both reduced by creating a sympathetic road environment in residential and pedestrian oriented areas and spaces. A 30km/h speed limit ensures that traffic is travelling at a speed slow enough to adapt to pedestrians.

The relationship between speed and injury severity is particularly critical for vulnerable road users. Pedestrians have been shown to have about 95% chance of survival when struck by a car travelling at 30km/h, but only about 58% chance of survival at 50km/h and virtually no chance of surviving a collision at 70km/h. This illustrates that the current blanket urban speed limit (50km/h) actually permits legal driving speeds which present a significant risk to pedestrians or other vulnerable road users if they are involved in a collision with a vehicle driving at the legal limit.

The graph below illustrates the probability of fatal injury for a pedestrian colliding with a vehicle (source: Pasanen, 1991):

![Graph showing probability of death for pedestrian collisions](image)

Studies have shown that for every 1km/h vehicle speeds are reduced, a two to three per cent reduction in the number of crashes can be expected.

The actual time penalty incurred by drivers resulting from lowering the speed limit can be very small. For example in a French study a typical urban journey where the driver kept to a maximum speed of 30km/h resulted in an average speed of 16 km/h, where the same journey travelled at a maximum speed of 50km/h resulted in an average speed of 19km/h. This quite small difference in average speed was explained by the effects of being slowed by other vehicles and stops at intersections and pedestrian crossings etc. Another benefit of lowering speeds, in addition to accident reduction is that lower speeds and particularly smoother driving, saves fuel reduces emissions and can reduce journey time.

Many overseas cities have introduced lower speed limits as follows:
- 2004 Stockholm reduced shopping centre speed limits to 30 km/h
- 2004 Helsinki reduced shopping centre speed limits to 30 km/h
2008 Portsmouth (UK) reduced all city streets to 20 mph (approx 30km/h)

Vancouver has a blanket speed of 40 km/h in all city streets and 30 km/h around schools and shopping areas.

Kingston upon Hull (UK) introduced 20mph (approx 30km/h) on a quarter of all its roads.

On those streets in Helsinki where the speed limit was reduced in 2004 the speed was reduced on the average by 4 percent. As a result fatal, serious crashes and accident costs were reduced by 15 percent.

In Kingston upon Hull there has been a 56% reduction in total collisions and a 90% reduction in serious and fatal collisions.

Lowering the speed limit through suburban shopping areas is compatible with other planned reductions to speed limits being brought forward through the SaferRoads programme for residential areas.

5.4 Problem definition – inappropriate speed

Suburban shopping areas present a range of challenges for all road users. These are streets with shoppers looking to cross the road at various points, parked vehicles around which pedestrians might suddenly appear, delivery vans, cyclists, buses and people who might risk crossing the road where perhaps they shouldn’t. These are areas where there may be schools, daycare centres, Kindergartens and elderly people. It is important that speed limits are appropriate to the particular environment.

The observed speeds of vehicles in suburban shopping areas in Wellington as shown in Table 1 were taken in April 2009. The mean speed in most shopping areas is currently around 35km/h. The Rule allows for limits less than 50km/h to be set provided that the observed mean speed of passing vehicles is within 5km/h either side of the proposed speed limit. In shopping areas where speeds are currently higher than 35km/h we will look at traffic calming measures to bring speeds down to an appropriate level to permit the introduction of a 30km/h limit.

Although some might argue that current speeds in these areas are already low enough, bringing the legal limit down to 30km/h will reduce the severity and incidence of crashes with little effect on travel time and therefore no inconvenience for most drivers.
Table 1: Traffic count data

<table>
<thead>
<tr>
<th>Street</th>
<th>Suburb</th>
<th>Average speed (km/h)</th>
<th>Daily traffic count (Veh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aro Street</td>
<td>Aro Valley</td>
<td>38</td>
<td>8,355</td>
</tr>
<tr>
<td>Adelaide Road</td>
<td>Berhampore</td>
<td>35</td>
<td>15,307</td>
</tr>
<tr>
<td>Cleveland Street</td>
<td>Brooklyn</td>
<td>32</td>
<td>3,302</td>
</tr>
<tr>
<td>Taurima Street</td>
<td>Hataitai</td>
<td>32</td>
<td>6,142</td>
</tr>
<tr>
<td>Moxham Avenue</td>
<td>Hataitai</td>
<td>25</td>
<td>9,614</td>
</tr>
<tr>
<td>Waitoa Road</td>
<td>Hataitai</td>
<td>33</td>
<td>4,366</td>
</tr>
<tr>
<td>The Parade</td>
<td>Island Bay</td>
<td>35</td>
<td>11,583</td>
</tr>
<tr>
<td>Johnsonville Rd</td>
<td>Johnsonville</td>
<td>33</td>
<td>20,849</td>
</tr>
<tr>
<td>Moorefield Road</td>
<td>Johnsonville</td>
<td>37</td>
<td>14,487</td>
</tr>
<tr>
<td>Broderick Road</td>
<td>Johnsonville</td>
<td>31</td>
<td>11,463</td>
</tr>
<tr>
<td>Karori Road</td>
<td>Karori</td>
<td>33</td>
<td>15,489</td>
</tr>
<tr>
<td>Karori Road</td>
<td>Marsden Village</td>
<td>35</td>
<td>15,497</td>
</tr>
<tr>
<td>Parkvale Road</td>
<td>Karori</td>
<td>29</td>
<td>4,606</td>
</tr>
<tr>
<td>Upland Road</td>
<td>Kelburn</td>
<td>32</td>
<td>13,954</td>
</tr>
<tr>
<td>Rongotai Road</td>
<td>Kilbirnie</td>
<td>28</td>
<td>9,303</td>
</tr>
<tr>
<td>Coutts Street</td>
<td>Kilbirnie</td>
<td>28</td>
<td>6,826</td>
</tr>
<tr>
<td>Onepu Road</td>
<td>Kilbirnie</td>
<td>35</td>
<td>8,689</td>
</tr>
<tr>
<td>Bay Road</td>
<td>Kilbirnie</td>
<td>15</td>
<td>5,280</td>
</tr>
<tr>
<td>Ganges Road</td>
<td>Khandallah</td>
<td>34</td>
<td>2,226</td>
</tr>
<tr>
<td>Collins Avenue</td>
<td>Linden</td>
<td>35</td>
<td>6,639</td>
</tr>
<tr>
<td>Park Road</td>
<td>Miramar</td>
<td>28</td>
<td>5,422</td>
</tr>
<tr>
<td>Miramar Avenue</td>
<td>Miramar</td>
<td>35</td>
<td>15,437</td>
</tr>
<tr>
<td>Ottawa Road</td>
<td>Ngaio</td>
<td>39</td>
<td>14,422</td>
</tr>
<tr>
<td>Bracken Road</td>
<td>Newlands</td>
<td>38</td>
<td>9,353</td>
</tr>
<tr>
<td>Stewart Drive</td>
<td>Newlands</td>
<td>44</td>
<td>5,820</td>
</tr>
<tr>
<td>Northland Road</td>
<td>Northland</td>
<td>32</td>
<td>4,784</td>
</tr>
<tr>
<td>Dundas Street</td>
<td>Seatoun</td>
<td>45</td>
<td>3,275</td>
</tr>
<tr>
<td>Falkirk Avenue</td>
<td>Seatoun</td>
<td>34</td>
<td>619</td>
</tr>
<tr>
<td>Broadway</td>
<td>Strathmore</td>
<td>33</td>
<td>11,403</td>
</tr>
<tr>
<td>Main Road</td>
<td>Tawa</td>
<td>34</td>
<td>14,927</td>
</tr>
<tr>
<td>Cambridge St</td>
<td>Tawa</td>
<td>33</td>
<td>3,556</td>
</tr>
<tr>
<td>Tinakori Road</td>
<td>Tinakori shops</td>
<td>34</td>
<td>12,781</td>
</tr>
<tr>
<td>Wadestown Road</td>
<td>Wadestown</td>
<td>33</td>
<td>5,188</td>
</tr>
</tbody>
</table>

* Speeds that are over the 35km/h threshold
5.5 Proposal

It is proposed to lower the speed limits from 50km/h to 30km/h on the sections of road which run through the suburban shopping centres. We will use the shopping centre areas as defined in the District Plan as the main guideline when consulting. We could expect small variances to the sections of road where the proposed speed limits will apply during the consultation process.

A four year forward programme is proposed, prioritised on crash history, pedestrian and vehicle density, vehicle speeds, community concerns and an assessment of benefit/cost.

5.6 Consultation

It is proposed to carry out a four week period of community consultation for each of the centres involved. Within the consultation period we will carry out an advertising campaign, visit local shopping areas and mail out a brochure outlining the proposal with a submission form attached, after working with the local residents associations and ward councillors. A detailed communication and marketing plan will be produced.

6. Conclusion

The benefits of lowering the speed of vehicles in suburban shopping areas are to improve the actual and perceived safety of pedestrians and other vulnerable road users, encourage more active modes of transport, and create a generally more pleasant shopping, business and living environment.

Lowering the speed limit will acknowledge the long standing concerns of local communities.

Consultation with the communities and key stakeholders will be undertaken before any of the proposed changes are put into effect.

Contact Officer: Stuart Bullen, Senior Traffic Engineer
### Supporting Information

1) **Strategic Fit / Strategic Outcome**  
This report is consistent with the Council’s Strategic outcome 2.5 Safer – ‘Wellington will seek to improve the safety and security of its citizens as they move around the City and region’.

2) **LTCCP/Annual Plan reference and long term financial impact**  
The project is contained in the Council Plan # CX445.

3) **Treaty of Waitangi considerations**  
There are no direct treaty considerations

4) **Decision-Making**  
This is not a significant decision. The report sets out proposed package of works and corresponding consultation consistent with the LTCCP

5) **Consultation**  
   a) **General Consultation**  
   Consultation will be consistent with that previously carried out in other areas where lower speed limits have been rolled out and will be in conformity with the Bylaws and Land Transport rules.

   b) **Consultation with Maori**  
   No specific consultation with Maori is proposed

6) **Legal Implications**  
There are legal requirements involved in setting new speed limits. These are detailed in the Bylaws and Speed Limit Rule

7) **Consistency with existing policy**  
This report is consistent with existing WCC policy