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**REPORT 3**  
*(1215/52/IM)*

## **SPEED LIMIT REDUCTION PROGRAMME**

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### **1. Purpose of Report**

To provide an overview of the current programme for speed limit reduction and (preliminary) suggestions for future initiatives in this area.

### **2. Executive Summary**

Wellington City Council is accepted as being a clear leader in urban speed management in New Zealand, however we are behind what is considered to be international best practice in this area.

The Ministry of Transport's Safer Journeys proposal promotes "Safer Speeds" in their safer systems approach. This approach envisages all road controlling authorities to adopt lower speed limits in urban areas and to follow the lead we have taken.

It is proposed that through current programmes a number of speed limit changes will be brought to Council for its approval.

Future changes to legal limits are proposed in the following areas:

- Suburban centres – Remaining 17 centres
- SaferRoads – Area-wide speed reduction (including CBD)
- Great Harbour Way – Coastal routes
- Rural areas – Takapu and Horokiwi

It is proposed to install active school warning signs at most schools in Wellington rather than installing variable school speed signs.

### **3. Recommendations**

Officers recommend that the Strategy and Policy Committee:

1. *Receives the information.*
2. *Note that officers will bring back specific reports with recommendations for reducing speed limits on roads within the city as proposed.*

## **4. Background**

This section describes changes in speed limits and speed limit setting processes in Wellington over the last 15 years.

Prior to 2003 the responsibility for setting speed limits sat with central government and was administered by the Land Transport Safety Authority (LTSA). Changes to speed limits were difficult to achieve as the criteria for change was very prescriptive and there appeared to be little willingness to try something new. The cost of administering the process sat entirely with the LTSA, they were required to undertake warrant surveys, consultation and then gazette any proposed changes.

In the mid 90's Council passed a resolution to seek a review of the speed limits on Happy Valley Road, Hutt Road and the rural roads west of Karori. The LTSA maintained that the posted speed limits were appropriate and therefore not able to be changed.

Wellington City Council along with many other Road Controlling Authorities (RCA's) advocated for the ability to set our own speed limits that better matched community expectations. This advocacy through Local Government NZ and Trafanz led to the passing of the Land Transport Rule, Setting of Speed Limits 2003. While this rule now allows RCA's to set speed limits by bylaw it required Council to go through a highly prescriptive process to achieve a speed limit change with the cost lying with the RCA.

The speed setting rule 2003 made provision for the first time in New Zealand for speed limits less than 50 km/h.

In 2002 following an extensive trial in Christchurch, provision was made for RCA's to install variable school speed limit signs, at that time permission had to be sought from the Director of the LTSA but was subsequently allowed for under the speed setting rule in 2003. Initially the cost to set up a school with the necessary signage was approximately \$50,000.

In 2001 Council approved the proposal for our SaferRoads programme; this was a new innovative approach to road safety in New Zealand and was based on successful schemes implemented throughout Europe and the UK. A key component of this area-based approach was using speed limits to reinforce the road hierarchy in residential areas.

In 2003 we commenced the first SaferRoads schemes in Tawa, Ngaio and Khandallah. The original consultation flagged our intention of lowering the speed limit across each of these areas. Feedback at this time was mixed.

The speed setting rule 2003 requires that for speeds less than 50 km/h the posted speed is within 5 km/h of the operating speed. In the first SaferRoads areas the measured operating speeds prior to any engineering interventions

were often above 50 km/h. Following implementation of the engineering changes the majority of roads had a mean speed of 45 km/h or less making it possible to formally introduce a 40 km/h speed limit.

In April 2006 we undertook formal consultation with the community in Tawa with a proposal to reduce the speed limit on all roads in Tawa with the exception of Main Road. Almost 850 submissions were received, 250 submitters supported lower speed limits. Many of those that were in opposition indicated that there was no need for a formal reduction because we had achieved lower speeds through the engineering works. As a result officers did not proceed any further and Committee approval was not sought.

In 2004 Council adopted Part 6 - Speed Limits of the Consolidated Bylaw. This now means all roads under our control have a speed limit approved by and able to be amended by the Council.

In 2006 the first changes were made under our new bylaw. These changes gave effect to a 30 km/h speed limit on Lambton Quay and the lower part of Willis Street.

Prior to the 2003 speed setting rule, Wellington City Council had requested on several occasions for the LTSA to lower the 100 km/h speed limit on the rural roads west of Karori and Johnsonville and to reduce the speed limit on the rural section of Middleton Road. The criteria for setting speed limits (including in the new rule) clearly requires that these roads should all be designated with a 100 km/h speed limit. In 2005 Land Transport New Zealand (now NZTA) developed a new methodology for setting speed limits in rural areas, they invited RCA's to participate in a trial of this methodology.

In July 2006 following consultation and bylaw approval we posted speed limits on the rural roads west of Karori and Johnsonville to 50 or 60 km/h and Middleton Road to 70 km/h. Land Transport NZ monitored speeds along these roads over the following 18 months and concluded that the reduction in speed limits has effectively reduced both mean and 85<sup>th</sup> percentile speeds. While this is encouraging, other sites in the trial from elsewhere in the country did not have the success we have had in Wellington and as a result, the trial methodology has not been approved for use in the national Speed Setting Rule which is disappointing.

In 2008 Council approved a package of speed limit changes on Ohiro Road, Hutt Road and Takapu Road. These changes gave effect to reducing legal speeds on the Hutt Road from 100 and 70 km/h to 80 and 60 km/h, reducing part of Takapu Road from 100 to 70km/h and reducing the length of Ohiro Road where the 70 km/h limit applies to better reflect frontage activity.

In 2008 Council approved our first area-wide, lower speed limit as part of the Newtown SaferRoads programme. A blanket 40km/h speed limit now applies to all residential streets between Riddiford Street and the town belt to the east.

While it is too early to be definitive, there has been a marked reduction in reported crashes and positive community feedback.

In 2009 Committee approved a programme of lower speed limits through 21 of its suburban shopping centres. The first two suburban centres of Tinakori Road and Aro Valley proceeded through Committee later that year. More recently a lower speed limit has been approved for the shopping centres in both Island Bay and Kilbirnie which will be in place by the end of September.

Through the consultation on the Golden Mile Restoration Project we have indicated the desire to continue with the existing 30 km/h Lambton Quay limit through the remainder of the Golden Mile including Manners Street and Courtenay Place. Feedback has been supportive. The formal consultation on this proposal and a proposal to lower the speed limit in the shared space of Lower Cuba Street to 10 km/h was undertaken in June/July this year, with a report to Council scheduled for September 2010.

## **5. Discussion**

### ***5.1 Adoption of lower speed limits in urban areas***

Speed affects the likelihood and impact of all crashes. Small reductions in impact speeds greatly increase the chances of surviving a crash, particularly for pedestrians or cyclists. This is why speed management is a key element of road safety strategies worldwide.

Road safety experts worldwide have increasingly recognised that a 50 km/h speed limit is generally too high for residential neighbourhoods and busy town and city centres where there are many pedestrians. This reflects a better understanding of the impact that speed has on the human body. Small reductions in impact speed greatly improve chances of survival in a crash. A pedestrian hit at 45 km/h has roughly a 50 percent chance of survival. At 30 km/h the chances of survival are 90 percent. Children and the elderly are more vulnerable. In addition to the safety benefits, lower speeds create a better ambience and encourage more activity around retail centres and local neighbourhoods, which is important for economic development and social interaction.

Many countries are dropping their urban speed limits and some impressive results have been reported. For example, the City of Hull in England introduced a 20 mph (32 km/h) speed limit on over a quarter of its urban roads, which contributed to a 90 percent reduction in fatal and serious injury crashes.

### ***Chance of death at different impact speeds***

<b>Collision type</b>	<b>Probability of death</b>		
	<b>10%</b>	<b>30%</b>	<b>50%</b>
Pedestrian struck by car	30 km/h	40 km/h	45 km/h
Car driver in side impact collision with another car	50 km/h	65 km/h	75 km/h
Car driver in frontal impact with another car	70 km/h	95 km/h	105 km/h

*From "Safer Journeys" New Zealand's Road Safety Strategy 2010-2020*

## **5.2 Speeds Around Schools**

### **5.2.1 School Speed Zones**

In recent years changes in legislation have enabled RCA's to install dynamic road signs around schools to either warn motorists of the presence of school children or to formally reduce the speed limit before and after school.

There is a very fixed criteria to lower the legal speed limit before and after school. Before the speed limit can be approved by Council it must meet the same consultation requirements as any speed limit change and meet the following warrant criteria:

#### **Variable Speed Limit**

A road controlling authority may set a speed limit of 40 km/h that operates in a school zone during the periods specified below. At all other times, the speed limit is the permanent speed limit for the road.

#### **Periods of Operation**

The 40 km/h speed limit may operate on school days for a maximum period of:

- (a) 35 minutes before the start of school until the start of school;
- (b) 20 minutes at the end of school, beginning no earlier than 5 minutes before the end of school;
- (c) 10 minutes at any other time when at least 50 children cross the road or enter or leave vehicles at the roadside.

#### **Length of Variable Speed Limit**

A variable speed limit in a school zone must be a minimum length of 300 metres but should not be longer than 500 metres. The length of variable speed limit on side roads that intersect with the school zone may be shorter than 300 metres.

## **Warrant**

A road controlling authority may only set a variable speed limit in a school zone under the following conditions:

- (a) There is a high level of school-related activity on the road outside the school, with at least 50 children crossing the road or entering or leaving vehicles at the roadside; and
- (b) the traffic on the road outside the school meets at least one of the following conditions:
  - (i) The mean speed of free-running vehicles is greater than 45 km/h; or
  - (ii) the 85th percentile speed of free-running vehicles is greater than 50 km/h; or
  - (iii) there have been speed related crashes in the previous five years; or
  - (iv) the school-related activity occurs on a main traffic route.

In Wellington most schools meet the criteria (a) for a high level of school related activity on the road, however very few schools meet the criteria (b) (i) or (ii) in terms of vehicle speeds past the school during the times the limits apply because of our narrow and often congested roads around our schools. There are no schools in Wellington that meet criteria (b) (iii) relating to speed related crashes. The only criteria that applies to Wellington schools are those that meet (b) (iv) of being on a main traffic route. We would regard a main traffic route as being a principal road or greater meaning that very few Wellington schools would be eligible for a variable speed limit.

School speed zone signage costs approximately \$35,000 to implement per school. It is proposed to use these only in exceptional circumstances where other options have been tested and found to be deficient.

### **5.2.2 Active School Warning Signs**

As an alternative to installing variable speed limits around schools it is proposed that active school warning signs be used, these have been installed at Wadestown, Owhiro Bay and Cardinal McKeefry schools. Installation costs are cheaper and the process is similar to that for a school speed zone but significantly simpler to approve and operate as they do not require formal consultation and can be operated as the school deems appropriate. In contrast school speed zones are very prescriptive when and for how long they can be used and a log must be kept for the times they were operational, so that it can be produced in court if a speed infringement notice is challenged.

An example of each of the signs is shown below.



Active School Warning Sign



School Speed Zone Sign

It is proposed that active school warning signs be rolled out as necessary as part of the Council's School Travel Planning Programme that is targeting all schools in Wellington over the next seven years.

Active School Warning signs cost approximately \$25,000/school. Our current programme allows for up to three schools to be treated annually.

### **5.3 Suburban Centre Speed Reduction**

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 SaferRoads programme, officers developed a proposal using NZTA's 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 we 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.

In June 2009 Committee gave approval in principle to lowering the speed limit in the following suburban shopping centres:

<i>Aro Valley</i>	<i>Kelburn</i>	<i>Ngaio</i>
<i>Berhampore</i>	<i>Khandallah</i>	<i>Northland</i>
<i>Brooklyn</i>	<i>Kilbirnie</i>	<i>Seatoun</i>
<i>Hataitai</i>	<i>Linden</i>	<i>Strathmore</i>
<i>Island Bay</i>	<i>Marsden Village</i>	<i>Tawa</i>
<i>Johnsonville</i>	<i>Miramar</i>	<i>Tinakori shops</i>
<i>Karori</i>	<i>Newlands</i>	<i>Wadestown</i>

To date the speed limit has been approved in Aro Valley, Tinakori Shops, Island Bay and Kilbirnie. The speed limit through the Newtown shopping area had previously been reduced through the SaferRoads programme.

We plan to continue with the current programme targeting four suburban centres per year.

#### **5.4 SaferRoads**

The SaferRoads programme is an area-based safety programme that commenced in 2002. The programme addresses road safety, walking and cycling issues suburb by suburb across the city based on similar successful projects implemented through the United Kingdom and parts of Europe. A critical success factor in these projects is the ability to implement area-wide speed reduction. To date the only SaferRoads area where we have implemented a speed limit less than 50 km/h has been Newtown, where we have seen a significant reduction in reported crashes in the treated area.

Over the next two to three years the SaferRoads programme will be concentrating on inner city Te Aro. Through this, coupled with bus priority measures and the 2040 central city framework we propose to report back to Committee with a proposal to reduce the speed limit on inner central city streets, leaving the arterial network at 50 km/h.

After the central city the SaferRoads programme is planned to continue in the residential suburbs and will include area-wide speed reduction proposals similar to that approved for Newtown. Once we have a critical mass of approved lower residential speed limits we will then return to those areas that have had the physical interventions but are missing the speed limit reduction element.

#### **5.5 Great Harbour Way**

Through both the walking and cycling policies Council has given support to the concept of the “Great Harbour Way” (GHW) This is a proposal to provide a walking and cycling facility at or close to the foreshore around the harbour and south coast. Within Wellington City the GHW would run from the Hutt City boundary at Horokiwi around the harbour and south coast to Owhiro Bay.

A coalition of interested parties and advocates has been formed, comprising members of Living Streets Aotearoa, Cycle Aware Wellington, Rotary Club of Hutt Valley, Wellington Waterfront and individuals committed to a vision of this exciting recreation, active transport and tourism initiative for the Wellington area.

While the detail for how and where the GHW is to be implemented has not yet been approved by Council, the concept provided by the GHW coalition included a proposal to reduce the speed limit to 30 km/h on the coastal route around the Miramar Peninsula.

As progress is made through the Cycling Policy, a proposal to formally reduce the speed limit on the south coast may also have merit. However it is likely that physical interventions to slow the traffic would be required before we could consider such a lower limit.



Officers propose to bring to Committee a proposal to reduce the speed limits around the peninsula in 2011/12.

At a later date an extension to the south coast lower limit through to Owhiro Bay could come to Committee for consideration.

### **5.6 Rural Areas**

As indicated Council participated with LTNZ in a trial of the speed setting methodology for rural roads. As part of this trial we submitted that all of our rural roads be included. Horokiwi Road and Takapu Road were rejected by LTNZ as they did not fall within their criteria, however we achieved lower speed limits in Makara and Ohariu and also Middleton Road through the trial process.

In regard to Horokiwi and Takapu roads, both of these roads have a 100 km/h posted speed limit and are the only roads under our control with a speed limit of over 80km/h.

From time to time there are requests from residents in these areas for Council to make engineering changes to improve safety. As both roads are lightly trafficked and don't reflect significantly in reported crashes, requests for physical interventions are given a low priority.

A lower speed limit of 50 or 60 km/h is likely to lead to an improved level of safety and a reduction in perceived risk.

While there is not as strong a local community push for this work as there was in the other rural areas, it is believed that the benefits would be clearly understood by those communities and strongly supported.

Therefore officers propose to bring to Committee a proposal to reduce the speed limits in these areas in 2011/12.

### **5.7 One-off requests**

We receive one-off requests from individuals and communities for changes in speed limits, in many cases traffic calming or enforcement is more appropriate, however there are some requests that have merit.

An example of a recent request is to reduce the speed limit on Oriental Parade. This could fit with the officer's current thinking in regard to speed management along the Great Harbour Way of which it is part. Another example is speed management around schools whether it is school speed zones or active school warning signs, currently the programme only allows for three schools per year to be implemented.

As resources are fully committed with a large speed limits programme and long delivery times, it is proposed to evaluate all such requests and its compatibility

with our current policies to prioritise them and include them in the forward programme.

### **5.8 Existing Budgets and Indicative Programme**

The table below gives the approximate costs over the next five years to implement individual speed limit changes. This assumes that the onsite conditions meet the criteria for the proposed limits ie the cost of traffic calming if required is not allowed for. The costs are for capital outlay and include consultation costs.

	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>	<b>2013-2014</b>	<b>2014-2015</b>
Suburban Centre Speed Reduction	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Active School Warning	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Great Harbour Way (Shelly Bay to Seatoun)	\$15,000				
Great Harbour Way (Oriental Parade)	\$25,000				
Great Harbour Way (Seatoun to Moa Point)		\$15,000			
Great Harbour Way (Lyall Bay to Owhiro Bay)			\$25,000		
Complete Rural Areas		\$30,000			
Golden Mile	\$20,000				
SaferRoads Inner City		\$20,000	\$30,000		
SaferRoads Suburban Roads (new areas)				\$50,000	\$50,000
	<b>\$195,000</b>	<b>\$200,000</b>	<b>\$190,000</b>	<b>\$185,000</b>	<b>\$185,000</b>

### **5.9 Consultation and Engagement**

The setting of Speed Limits Rule 2003 and Part 6 of the Wellington City Council Bylaw sets out the requirements for consultation and engagement around making changes to speed limits. This includes engaging with directly affected residents and extensive consultation with the wider community.

### **5.10 Financial Considerations**

The proposed programme fits with existing budgets and programmes and receives 53% financial assistance from the NZTA.

### **5.11 Climate Change Impacts and Considerations**

Promotion of walking and cycling is a key aspect for reducing our emissions from within the transport sector. Areas with speed limits less than 50km/h provide a safer environment for vulnerable road users and are therefore expected to lead to a greater uptake in sustainable transport.

### **5.12 Long-Term Council Community Plan Considerations**

This report does not seek to make any changes to that already proposed through our current approved projects and programmes and reflects the current LTCCP.

## **6. Conclusion**

Within New Zealand, Wellington is a leader in speed management, however internationally we are still behind what is considered best practice. There are clearly established and recognised benefits to society for implementing lower speed limits in urban areas. The Ministry of Transport is proposing that these lower speed limits be adopted by all RCA's throughout New Zealand as part of the Safer Journeys 2020 Road Safety Strategy.

Officers have an established programme for speed reduction that fits within a number of Council policies and projects. It is proposed to continue with this programme and bring reports to Committee recommending undertaking a consultation and engagements process as required under the speed setting rule and Council Bylaw, before then bringing individual speed limits back to Committee and Council for approval.

Contact Officer: *Paul Barker, Safe & Sustainable Transport Manager,  
Transport Planning*

## Supporting Information

### **1) Strategic Fit / Strategic Outcome**

*The paper supports Council's transport strategy that supports the economic, social, cultural and environmental aspirations of its citizens*

#### **MORE LIVEABLE**

*Wellingtonians will have good access from homes to shops and places of work and recreation, priority walking routes to and within the central city, and access to parking.*

#### **BETTER CONNECTED / HEALTHIER**

*The transport network allows people to move easily throughout the city using all forms of transport, and walking and cycling are promoted.*

#### **MORE SUSTAINABLE**

*The transport system will operate to minimise environmental harm – by operating efficiently, providing viable alternatives to private cars, and reducing the need to travel*

#### **SAFER**

*The city will be safer for all transport users (cyclists and pedestrians as well as people in cars).*

### **2) LTCCP/Annual Plan reference and long term financial impact**

*The programme is contained within a number of Council projects as indicated. The current programme is budgeted for within the current LTCCP.*

### **3) Treaty of Waitangi considerations**

*There are no Treaty of Waitangi implications in this report*

### **4) Decision-Making**

*This is not a significant decision. The report sets out a programme of work that will see individual proposals brought back to Committee and Council for a formal decision and approval through the bylaw*

### **5) Consultation**

#### **a) General Consultation**

*Consultation is not required on this report, however subsequent proposals to lower the speed limit will require formal consultation as set out in the speed setting rule 2003 and the Part 6 of the Wellington City Council Bylaw.*

#### **b) Consultation with Maori**

*There is no specific need to consult with Maori on this report.*

**6) Legal Implications**

*There is no specific need to consult with our lawyers on this report.*

**7) Consistency with existing policy**

*This report is consistent with our existing policies*