

Manager
Traffic Engineering Hobart City Council
GPO Box 503
Hobart 7001

(Date)

Speed Cushions - Waterworks Road

Dear Sir/Madam,

This representation is being made on behalf of the Waterworks Valley Community following community meetings, discussions and feedback.

Our community members have made written and verbal representations prior to Council's decision. We understand that further community consultation is now being carried out as a requirement of DIER.

We see no need at this stage to re-iterate our previous submissions, since these are contained in the report compiled for Hobart City Council deliberation. However, for the benefit of DIER's assessment process we wish to summarise our position and give additional clarification and feedback on a few unresolved points and side issues.

1. The evaluation process:

Although the decision-making delays have been regrettable, we are satisfied that Council's internal assessments and its community consultation processes and decision making have been elaborate, fair and professional. We accord with Council's decision, albeit with some qualifications (see further below).

2. The demonstrated need:

Council engineers have assessed that there is a need for traffic calming measures in Waterworks Rd and a strong majority of local residents have perceived this need, as evidenced by survey results.

We are aware that speeding problems have been identified in a number of residential streets in the Hobart environs, however we submit that Waterworks Road should be considered a priority case taking into account the risk assessment and inappropriateness of the street architecture as a fast thoroughfare.

3. Pedestrian / cyclist safety:

Our community has a high population of school-age children (50) and most of them walk to school. Many local parents are concerned for their children's safety.

A 2004 study published by the American Public Health Association¹ confirmed that

car accidents are a leading cause of death and injury amongst children aged between 5 to 14 years and that speed humps were associated with lower odds of children being injured within their neighbourhood and being struck in front of their home. We have every reason to believe the same research would apply in Australia.

There is a strong focus on community health (a government policy priority) within our community and a high proportion of residents walk or ride bicycles to work. There is no bus service in the valley.

4. Duty-of-care requirement

In supporting the state government's promotion of healthy living (including promotion of walking and riding to school and work), we believe Council and DIER have a duty-of-care to ensure that citizens who take up healthier lifestyles have the benefit of a safe environment.

5. Traffic accident history:

We have appended DIER's crash history report for the road, but wish to point out that this history is necessarily incomplete – a number of quite serious accidents have occurred that have not been reported. If there is a demand for it we can compile some verbal data from residents on unreported accidents.

We are aware that there have been no fatalities recorded during the history period, but we submit that traffic calming should be pre-emptive, not responsive to fatalities.

6. Traffic mitigation measures.

Traffic engineers are faced with two responses to mitigation of traffic hazards: (1) reduce the numbers of vehicles or (2) reduce the speed of vehicles. In this instance we believe it is appropriate that the focus is on speed reduction, and this supports Councils decision regarding traffic calming in Waterworks Road – rather than restrictions on the numbers of vehicles using the thoroughfare.

7. Opposition to traffic calming

Opposition to traffic calming measures comprises a mix of ideologically driven opposition and more thoughtful concerns about issues such as personal inconvenience.

a) Ideological opposition:

Whenever traffic calming is proposed in any area motoring enthusiasts mount strident campaigns to oppose them. In Australia the over-riding body feeding such campaigns is the *National Motorists Association Australia*, which operates under the subheading "*Fighting for Motorists Rights*" (It's website is instructive: <http://www.aussiemotorists.com/>)

Motoring enthusiasts run information campaign opposing speed cameras, speed humps and traffic calming measures, speed limits on highways and breath testing, amongst other issues.

We submit that motoring enthusiasts have a democratic right to lobby for their perceived interest, however we submit that Council and DIER need to be principally responsive to the overall public interest, including the interests of non-motorists and the majority of motorists who do place a high priority on road safety.

b) Legitimate concerns:

Some local submissions have raised issues that are relevant to Council and ought to be seriously considered.

Opponents have principally questioned the need for any traffic calming in the street on the grounds that there is no perceived hazard. We contest that view strongly, but we are in agreement with them about some matters:

8. Inadequacy of footpaths

There is a common agreement that safety in Waterworks Road is partially impaired owing to lack of suitable footpaths. There is no contiguous footpath down either side of the street, resulting in pedestrians (including school children) having to cross the road in risky situations.

Council is aware of this problem and is investigating. Speed hump opponents have submitted that remedying this should be seen as an alternative to traffic calming measures. Whilst we agree on the inadequacy of footpaths, we submit that even with satisfactory footpaths in place there is a basic need to address the issue of speed.

Accidents to date have not been caused by lack of footpaths. Most streets that do have speed humps also have adequate footpaths. The two issues are complementary and should not be seen as compensatory.

9. Traffic calming options

There is common agreement that the installation of speed humps is an expedient measure and is not the most desirable or efficacious way to calm traffic.

In recent years manufacturers have developed modular, bolt-on speed cushions (similar to modular playground equipment). A host of companies is now in the market place and these companies are aggressively marketing the speed cushion devices to councils, businesses and government road management authorities. They do so on the grounds of cost effectiveness.

Hobart Council has accordingly confirmed that the speed cushion proposal is the most cost effective way to deal with traffic hazards in Waterworks Rd.

A more comprehensive solution to the problem requires close attention to streetscape planning, including the use of trees, chicanes, street narrowing and other measures. Those for and against the speed humps are in agreement about the desirability of

council pursuing a more comprehensive approach – though this would be more costly and require considerable planning delays.

As a result of the consultation process, Council has been made aware of this and has therefore agreed that the speed cushions be installed on a temporary basis, reflecting the need for immediate action, but allowing for policy change at a later date.

10. Speed cushions versus speed humps

Rubber speed cushions are cheaper to install than solid speed humps and are justified on the grounds that they make allowance for wide-axled emergency vehicles and the ability to remove them.

Residents have expressed some concerns about the rubber cushions on the grounds of a) aesthetics, b) the fact that they do not moderate the speed of speeding motorcyclists or speeding trucks and c) they incur a reduction in parking spaces.

Many would prefer the more aesthetic solid speed humps, but see this as an issue of preference. We therefore support Council's decision, albeit with some reservation.

11. Parallel traffic calming measures

There is also agreement that other parallel measures would considerably assist in reducing traffic hazard in the area. Aside from addressing lack of footpath amenity, it would be highly desirable for police and traffic safety instrumentalities to focus on the street for a period to facilitate a change of driving culture.

In particular, we request the occasional use of *Speed Indicator Devices*, so that local residents become aware of the speed at which they are traveling and thus learn to moderate their driving to suit the conditions. This is relevant to all traffic, but especially important for downward traffic, since the hill coming down from Ridgeway is very steep and conducive to motorists inadvertently building up speed without being aware that they are exceeding the speed limits.

Those for and against the speed humps are in agreement that speed signage in the road could also be improved. Some opponents have suggested that declaration of Waterworks Rd as a 40 kph zone would be a satisfactory alternative to speed cushions. However we submit that such a measure could only be effective if strictly policed.

12. Greenhouse impact of speed humps

It has been submitted that speed cushions cause an increase in greenhouse gas emissions, as speeding motorists slow down and accelerate between the humps. The road safety research unit at Monash University agrees that this is the case, but has concluded that this effect is too low to be a relevant issue and, in any case, is not relevant in the case of the majority of motorists who drive at appropriate speed.

13. Public safety versus inconvenience

Some opponents have complained that speed cushions unfairly trade off convenience of motorists against perceived safety.

We submit that the proposed speed humps would lengthen a traverse of Waterworks Road by a maximum of 30 seconds (measured by testing).

This is backed by considerable research. A report² prepared for the National Road Transport Commission has modelled the travel times costs associated with a decrease in urban speed limit from 60 to 50 km/h. They found that a 50 km/h urban speed limit would, on the assumption of a 5 km/h reduction in travel speed, result in the prevention of an estimated 3,000 casualty crashes in Australia and an increase in average travel time per trip of **less than 10 seconds** (our emphasis). Further, they found that a 10 km/h reduction in average cruise speed would prevent over 8,000 casualty crashes per year while at the same time increasing average travel time by **less than 26 seconds per trip**.

The same report concluded that: ... that there is a need to encourage better safety awareness and a change in attitudes toward speeding, and a need to give priority to less prioritized road-users who are more vulnerable to the effects of speed.

14. Safety is a priority concern

In 2002, 1.2 million people were killed and 50 million injured in road traffic crashes worldwide, costing an estimated US\$518 billion. According to Professor Robyn³ Norton (University of Sydney) without appropriate action, road traffic injuries are predicted to escalate from being the ninth leading contributor to the global burden of disease in 1990 to the third leading contributor by 2020. Statistically, some road user groups, particularly pedestrians and two-wheeler users, are vastly over-represented among crash victims.

In Australia, through assiduous attention to traffic hazards and speed abatement measures, government authorities have been successful in reducing the road death and injury rate, despite increased traffic density. We believe there is a moral obligation to continue building on this success in every way possible.

15. Traffic speed as a cause of injury

The Monash University Accident Research Centre has studied in detail the relationship between vehicle speed and the severity of accidents. That study⁴ concludes that very small reductions in travel speed (of only 4-5 km/h) can result in very substantial reductions in the risk of death or serious injury. In low speed urban zones the relationship has more to do with severity of injuries than deaths. And in that context, the study concludes that the relationship between speed and injury severity is a powerful one, concluding that speed has to be addressed as a determinant of injury severity.

16. Effects on emergency vehicles

A common motorist argument against traffic calming is that they slow down

emergency vehicles, such as ambulances. We believe this issue is wildly overstated and, to an extent, perverse. Emergency authorities do not advocate unsafe streets for their own benefit. Much research has been undertaken so that speed cushions improve safety whilst limiting any discomfort to those traversing them.

The speed cushions proposed for Waterworks Road allow for unimpeded speed of wide-axled emergency vehicles.

Conclusions:

Waterworks Valley Community appreciates the wide level of concern, both for and against the proposed speed cushions, and we have valued the input of objectors to the speed cushion proposal, especially in pointing out the limited value of speed humps as a long-term and comprehensive solution to traffic calming.

We believe the optimal solution would be to transform Waterworks Rd into a '6-star' rated streetscape. However, we appreciate that urban planning in Australia is not particularly advanced, compared to Europe, and that Hobart Council, like most Australian local government bodies, is not particularly advanced in the implementation of sophisticated urban planning models.

We therefore endorse Hobart Council's decisions to install the proposed speed cushions on a trial basis, to monitor their efficacy, and to examine ways to improve footpath quality in the street.

In time, we urge council and DIER to challenge traditional outlooks on urban planning with a view to applying more sophisticated planning models as is practised in other parts of the world. The critical issues of climate change and peak oil will inevitably bring on the need to radically alter the way we think about travel and to support the move towards sustainable travel and livable cities.

1. SEE: <http://www.ajph.org/cgi/content/full/94/4/646#top>

2. THE IMPACT OF LOWERED SPEED LIMITS IN URBAN AREAS Jeffery Archer, Nicola Fotheringham, Mark Symmons and Bruce Corben Monash University Accident Research Centre

3. ROAD-TRAFFIC INJURIES: CONFRONTING DISPARITIES TO ADDRESS A GLOBAL-HEALTH PROBLEM
Shanthy Ameratunga, Martha Hajar, Robyn Norton
The Lancet - Vol. 367, Issue 9521, 6 May 2006, Pages 1533-1540

4. TECHNOLOGY TO ENHANCE SPEED LIMIT COMPLIANCE, Corben B., Lenné M., Regan M. and Triggs T.
Accident Research Centre, Monash University