

## CATHEDRAL SQUARE SPEED LIMIT

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### PURPOSE OF REPORT

1. The purpose of this report is to evaluate the benefits, or otherwise, of lowering the speed limit in Cathedral Square from the existing posted limit of 30km/h to 20km/h in relation to noise from vehicle exhausts.

### EXECUTIVE SUMMARY

2. Members will be aware that the Misuse of Motor Vehicle Subcommittee discussed options for resolving noise problems in Cathedral Square at its meeting on 3<sup>rd</sup> March 2006.
3. The committee resolved "that it be recommended to the City Council that it investigates the introduction of a 20km/h speed limit, to vehicles in the precincts of Cathedral Square".
4. Tests were carried out using a car similar to that used by 'hoons' (a Subaru Impreza WRX with a "big bore" exhaust) on private land to determine the effects that the speed of the vehicle has on the noise emissions.
5. It must be made very clear that this report does not in anyway relate to the noise intrusion into buildings nor does it take into effect other influencing factors such as the "canyon" effect of building in and around Cathedral Square. It comments solely on the effects of speed, in relation to noise output from a vehicle.
6. It was evident from the tests (see attachment 1) that the difference in speed between 30 and 20km/hr or what gear the vehicle was in, had little or no effect on the noise. The manner in which the vehicle is driven has the greatest effect. When vehicles travel at a higher speed, the duration of the noise being emitted is reduced.
7. A seven day vehicle speed and volume count (see attachment 2) in Cathedral Square shows a mean speed of slightly less than 30km/h with the spread of speeds evenly distributed around 30km/h giving a 85% at 36.4km/h.
8. These measured speeds are attributed to the current driving environment and are unlikely to be lowered solely by changing the existing signs. This can be easily tested by asking people "what is the speed limit in the square" as most people are unaware of the very large 30km/hr signs when entering Cathedral Square.
9. Enforcement of the speed limit in Cathedral Square is not been seen as a priority by the Police partly because it has not been an issue. If the speed limit were to be lowered to 20km/h then there would have to be regular enforcement to achieve any significant reduction in speeds.
10. Changing the existing traffic environment sufficiently to promote a 20km/hr mean speed would require smoothing like speed humps. These would adversely affect the comfort level of bus passengers and also increase the noise levels as evident in the noise tests where stopping and starting a vehicle created the most noise.
11. Lowering the speed limit will affect all road users travelling through Cathedral Square. The drivers who create the noise problems, do so as it becomes a challenge to get away with it. The lowered speed limit just adds to this challenge. The existing noise problem will be created by vehicles accelerating to speeds greater than the existing speed limit.
12. The current legislation allows for enforcement to be carried out on noisy vehicles, and there is likely to be additional legislation later this year.

### CONCLUSION

13. Lowering the speed limit from 30km/h to 20km/h would achieve no measurable change in the noise emitted from vehicle exhausts. Greater enforcement of the current speed limit and noise control measures would have a far greater effect.

**OFFICER RECOMMENDATIONS**

It is recommended that:

- (a) the information be received.
- (b) the Misuse of Motor Vehicle Subcommittee pursue options of more enforcement rather than reducing the speed limit in Cathedral Square from 30km/h to 20km/h.