

Evaluation of a mechanism for urban road maintenance by level of service

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The paper made a welcome contribution to the discussion on models for road maintenance, and, in principle, for other public facilities. However, despite the reference to practical experience in maintenance by level of service in Australia and Uruguay, it appears that Chilean work has not yet reached this stage, and therefore results reported in the paper are based purely on theoretical modelling. Could the authors confirm if this is indeed the case and, if so, comment on the suggestion that their results are not actually dependent on the contractual model *per se*, but rather on the adoption of a rational approach to planning highway maintenance?

It would also be interesting to know if the authors feel that adopting road maintenance by level of service would be likely to have any impact on issues not employed to assess the performance of a contractor – for example, the visual appearance of a road, or its use as a public place by pedestrians.

Authors' reply

The authors would like to thank Mr Bowers for his contribution to their paper. The project's main aim was to evaluate a real case for this type of contract, using an actual contract of 10 km of lanes in an important downtown Santiago avenue, namely Avenue Alameda Bernardo O'Higgins. The analysis was carried out based on the HDM-III model for pavement surface modelling, which allows us to characterise the Alameda contract. Additionally, the rational approach to planning highway maintenance was used to give recommendations of when to use the level-of-service concept for future contracts in the city.

The Alameda contract also included the main parameters needed to define the levels of service – that is, pavement surface (potholes, cracks, rutting, IRI, etc.), as well as complementary works (painting, drainage, lights, signs, pedestrian paths, etc.). Even though complementary works were not simulated in the HDM program, it is necessary to include them in level-of-service contracts.