

Surrey has an Arterial and Major Collector roadway network (exclusive of TransLink funded Major Road Network or MRN) of 1003 lane-kilometers. The average condition of this network, as measured in 2003, is a Pavement Quality Index of 7.5 where 10 is the quality of a new pavement and 0 is the quality of a pavement in extremely poor condition.

The previous time that the pavement condition of the arterial and collector network (non-MRN) was assessed was in 1999. At that time, the pavement condition was measured at 6.8. Consequently, it can be seen that from 1999 to 2003, there was slight improvement in overall pavement condition.

Over the past six years (commencing with the creation of the MRN and separate funding for that network), Surrey has spent an average of \$2 million per year (general revenue) in pavement rehabilitation on Arterial and Major Collector roadways. However, in addition to this amount, pavements have been rehabilitated and reconstructed under the capital road widening program. In a typical arterial or collector widening project, the pre-existing pavement is overlaid or even replaced if re-profiling of the street is involved. Average expenditure on this pavement rehabilitation type work from under the widening program over the period 1999-2005 is as shown below:

	General Revenue	Component from DCC Widening Program	Total
1999	2.1	1.7	3.8
2000	1.2	0.5	1.7
2001	1.6	0.8	2.4
2002	1.9	1.1	3.0
2003	2.2	2.7	4.9
2004	2.9	3.7	6.6
2005	2.6	3.7	6.3
Total	14.5	14.2	28.7

The average total expenditure over this period is just over \$4 million. The pavement management system indicates that to maintain the pavement condition of the City's arterial and collectors at the current condition level, a funding range of \$4 to \$4.5 million is required. It can be seen that over the last 7 years this funding level has been in the needed range with funding increasing in more recent years.

MRN (TransLink Funded) Network

A number of arterial roadways in Surrey, comprising approximately 436 lane-kilometers, form part of the regional Major Roads Network. Rehabilitation of pavements in this network is funded by TransLink in an annual amount of \$5,000.00 per lane-kilometer, or approximately \$2.1 million. Due to the separate funding for the MRN, an independent PMS is maintained for the MRN in order to carry out an optimal rehabilitation program at the provided funding level. In 1998, at the time when the MRN was created, these roadways had an average condition of 7.7. In 2002, following annual rehabilitation at a funding level of approximately \$2 million per year, this average condition had decreased slightly, to 7.6.

The Pavement Management System indicates that for the overall Major Road Network, around \$3 million a year in funding is necessary to maintain pavement condition. As with the City's arterial road program, large capital investments by TransLink over the period 2004 to 2007 will offset this shortfall. However, TransLink will be made aware that the base level of funding that they provide is not adequate in the longer term.

CONCLUSION

The contribution to pavement rehabilitation derived from capital programs, in addition to the general revenue funded pavement rehabilitation budget, is keeping the average condition of the City's Arterial, Major Collector at a steady (or slightly improving) level. However, once these roadways have been widened to their ultimate standard, this funding opportunity will no longer be possible. As the City matures and these networks "built-out", additional pavement rehabilitation funding will be required in order to preserve the City's investment in this infrastructure once the capital program slows down in future years.

Similarly, on the MRN the current major capital expenditures on Fraser Highway will allow the City to improve the

overall MRN condition over the period 2004-2007. After this time, the City will have to pursue additional funding levels from TransLink for pavement rehabilitation.

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