



As a result of these challenges the Town is exploring other road surface types for use in urban areas. The most requested surface type is hot mix asphalt. In the past Staff has resisted this due to the high cost. For comparison:

- 1 km of traditional hot mix is \$120,000
- 1 km of tar and chip surface is \$17,000

These prices however do not include site prep, additional gravel, fine grading and compaction or shouldering. Currently the Town's budget for traditional hot mix paving is \$90,000 and \$145,000 for Tar and Chip resurfacing. If the Town elects to use tire crumb in warm mix asphalt, the cost will be higher.

Other alternatives such as cold-in-place process have been experimented with in Thornbury. This process was used in the Orchard Park subdivision in 2007 and proved difficult to place within the limits of the curbs. This method works best on rural roads because due to the size of the equipment train required for this process, it is difficult to use on narrow roads with tight turns

Another option is to place a thin lift of traditional hot mix asphalt without using an asphalt spreader. The material could be end dumped on site and graded with a road grader and compacted. This process could be performed by Town crews. Once the thin lift was in place a fog or slurry seal could be used to seal the material. This would provide a black road surface; while not having the strength of an asphalt road surface it would be cheaper.

To address the current tar and chip roads that still have loose gravel, Staff will explore the use of a fog seal in the spring. This is the placement of an emulsion over the stone that will further bind the stone and reduce/eliminate dust and fly stone. It will appear black like asphalt.

In the future staff will use a combination of road surfaces in urban areas to reduce the potential for dust and create the appearance of an asphalt road.

Traditional tar and chip resurfacing will continue to be used in rural areas where traffic volumes and speed are sufficient to compact the stone. In addition, Staff will monitor and work closely with Contractors to avoid the situation where prepared roads sit for an extended period of time waiting for the surface Contractor.

### **C. The Blue Mountains' Strategic Plan**

These works address the Town's Strategic Plan Goal #2 "Addressing the Town's Municipal infrastructure needs".

### **D. Environmental Impacts**

The single and double tar and chip surface resurfacing process is a cold process; the stone is not heated or dried. The energy required for this process is less than that of hot mix paving.

The energy requirements and emission levels are less than other resurfacing methods. In addition the materials used in these surface repairs can be recycled in the future.

**E. Budget Impact**

The introduction of cold-in-place, fog and slurry seals and the placement of traditional hot mix asphalt will increase costs resulting in fewer road improvements for a given budget. At this time, the Road Division will not be expanding the inventory of hard surface roads other than those assumed from the Developers. The focus will be on repairing and maintaining the existing road network.

**F. Attached**

None

Respectfully submitted,

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