

Probable Landfill Scenarios

The landfill has 8.7 million cubic meters of available airspace if the final design contours proposed in the Integrated Landfill Management Plan (ILMP) are achieved.

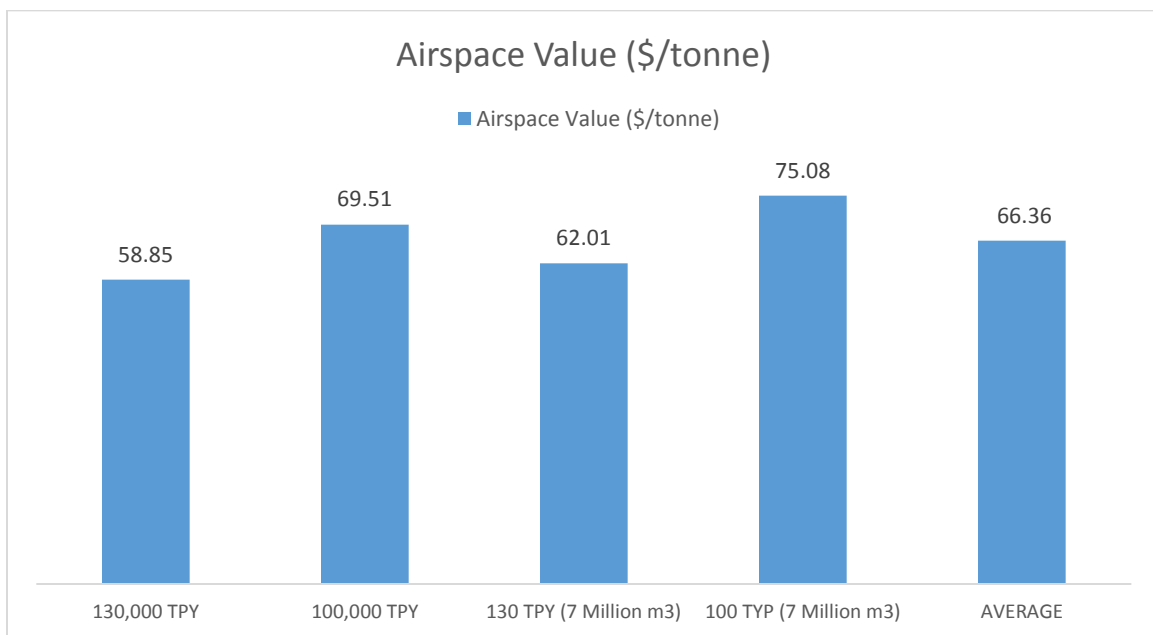
The ILMP uses a constant waste acceptance rate for future projection. The rationale for this estimate was based on accepting 130,000 tonnes per year; the waste acceptance rate in 2010, and assuming that any increase in waste due to future population growth would be offset by increased diversion opportunities.

Since 2010, the landfill has experienced a reduction in annual tonnage, largely attributed to increased landfill competition in the region and a significant loss of commercial waste tonnages. The 3 year average from 2015-2017 is approximately 100,000 tonnes of waste landfilled per year (TPY).

In estimating future landfill airspace consumption, four (4) scenarios have been calculated:

- 130,000 TPY – 8.7 Million Cubic Meters
- 100,000 TPY – 8.7 Million Cubic Meters
- 130,000 TPY – 7.0 Million Cubic Meters
- 100,000 TPY – 7.0 Million Cubic Meters

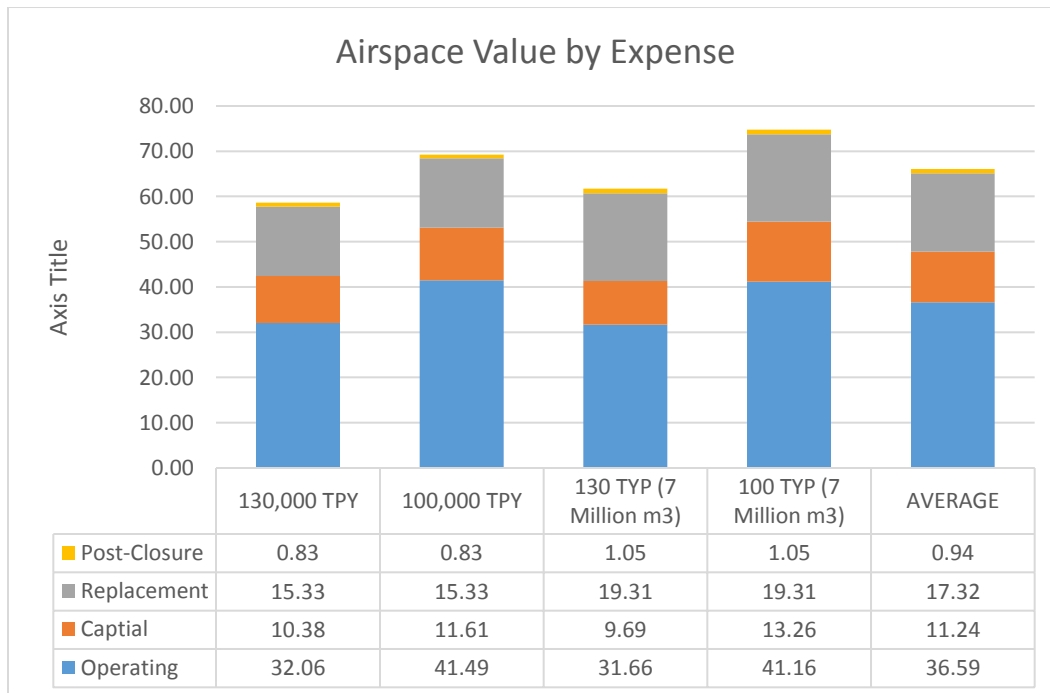
7.0 million cubic meters of remaining airspace represents the landfill achieving 80% utilization of the remaining airspace.



Landfill airspace values presented above, represent the total airspace value, covering costs for landfill operations, future capital, replacement capital, and post closure care costs. As the life of the landfill increases, the capital costs do not change; however, there are more years of operations to pay for. Conversely, the more waste that is brought in, reduces the cost as more waste can be disposed of for the only minor increases in operating costs. In all scenarios, the

replacement cost is amortized over the remaining life of the landfill, therefore increasing the cost with for scenarios with shorter lifespans.

Breaking down the cost into components to cover operating, capital, replacement, and post-closure, the airspace values have minor variations. The average is not drastically far away from any of the original scenarios.



For the purposes of future Landfill Replacement Reserve contributions (LRR), the reserve's purpose is to finance the cost of replacing the City's landfill; however, in practice it has also included funding for ongoing capital projects, and post-closure care of the landfill.

Combining these 3 portions of the airspace value, the LRR contribution rate that would adequately fund all 3 portions is approximately \$29.50/tonne.