

APPENDIX A: REQUIRED UPDATES TO ASSUMPTIONS AND INPUT INFORMATION

Assumption/Input Requiring Update	Description
Network Length	The road length is a key input for the model. Since the initial model was developed, the City's residential road network has increased by 90 km. This will improve the network condition initially, as new roads are in 'excellent' condition when they are added to the network. Additionally, as the number of roads being maintained increases, additional funding is required to maintain the same level of service.
Roadway Surface Age-Based Condition	The 2014 model assumed a deterioration rate of the roads based on the surface age of the pavement. In that model, a road would drop from 'excellent' to 'poor' condition in 25 years. New data collected through annual condition inspections since 2015, gives a more accurate state of the actual road condition and shows that additional factors impact the deterioration of the road condition including, traffic volumes, location, bus route designation, maintenance techniques, drainage, etc.
Inflation Rate	The 2014 model assumed that after the 1% incremental mill rate increases were complete in 2019, the funding would continue to grow at a rate of 2%. It was also assumed in the model that the contribution of 25% of the Street Infrastructure Renewal budget would grow at an annual rate of 3.34%. This is not the City's current standard budgeting practice. Inflation is not considered and funding levels remain at the same level indefinitely, unless additional increases are approved. Inflation was not considered in the new model.
Construction Cost Escalation Factor	One assumption that was not changed in this model was the Construction Cost Escalation Factor of 3.09%. When this factor is applied, the cost to complete the same amount of work increases each year. When implemented in the model, since the funding levels do not have inflationary increases, less work can be done each year with the same funding.