

## Tree Canopy

### Data Description

The 2009, 2014, and 2018 tree canopy layers shown in the tool below used the "QL2" LiDAR standard, which captures only 4 samples per square meter. Starting with the department's 2021 tree canopy layers, a higher quality LiDAR standard called "QL1" was used. This new technology captures 8 samples per square meter.

This means that the new QL1 technology is better able to capture smaller saplings that the QL2 technology could have missed. QL1 also has the ability to better detect the fringes of tree canopy. Because of the higher resolution of QL1, the overall tree canopy capture for any given area is higher than it would be if it were measured by the older QL2 today.

Because the department will be using QL1 LiDAR from 2021 going forward, the canopy derived from this LiDAR cannot be compared to the older QL2 canopy captures. The trend for canopy percentages for 2009, 2014, and 2018 shall be considered one trend. And **going forward from 2021, we shall establish a new trend with this and all future canopy captures.**

#### September 2025 Update

The Department has acquired its second QL1 tree canopy capture. As promised this will be the second datapoint in our new QL1 canopy trend. Due to the untimely death of the consultant that produced the department's first four captures, this second QL1 capture was performed by the department's planimetric prime consultant, Sanborn Inc.

Because of this, GIS staff is still evaluating the consistency of our first two QL1 captures. Some inconsistencies have been noted. But we believe the overall trend holds up.