



INSIGHT TREE IMAGING LLC

Level 3 Risk Assessment & Root Mapping

Sonic Tomography

Sonic tomography detects defects in trees by measuring the velocity of sound waves as they pass through wood. Differences in velocity help determine areas of sound wood and areas of compromised wood, which have less elasticity and density than sound wood. This reduction in elasticity results in the inability of sound waves to take a direct path through the wood, indicating the presence of the wood being compromised by decay pathogens or other defects such as cracks or included bark. An array of electronic sensors are attached at specific locations around the trunk or scaffold limbs. The data is then analyzed by specialized computer software creating a set of internal cross-section images, which indicate areas of decay, hollows, cracks, or other features that may reduce wood strength.