

## Basic Appraisal Workshop

### Spreadsheet Key

**Trunk Circumference:** The distance around the perimeter of the tree trunk as measured with a standard measuring tape. Standard measuring height is 4.5” above grade. The height measured should best reflect the size of the tree. Multiple-trunk trees should have one circumference measurement for each trunk measured.

**Trunk Diameter:** The distance of a straight line passing through the center of the trunk. This is calculated by dividing the Trunk Circumference by  $\pi$  or 3.14. Multiple-trunk trees should have one diameter calculation for each trunk measured.

**Trunk Area:** The cross-sectional area of the trunk at the measured height. This is calculated by squaring the diameter, dividing by 4, and multiplying by  $\pi$  or 3.14. If multiple trunks are measured, the trunk area of each trunk is calculated individually and then added together to result in a single value for the total cross-sectional area.

**Unit Tree Cost:** Cost per square inch of the LCANT. This value can be queried from regional plant appraisal committee guides, or it can be manually derived by contacting nurseries and finding the mean size and cost of available nursery stock.

**Basic Tree Cost:** Theoretical cost of reproducing a “notionally ideal” tree of equivalent size to the subject tree. This is calculated by multiplying the Trunk Area by the Unit Tree Cost.

**Health Rating:** Assessment of factors such as vigor, foliage size and color, leaf density, presence or absence of pests, twig growth rate, amount of twig or branch dieback, and wound closure. Rated on a scale of 0% to 100% (see chart below).

**Structure Rating:** Assessment of the tree’s ability to withstand mechanical loading. Factors to consider are mechanical strength, response growth, lean, cracks, decay, and the presence of multiple defects. Rated on a scale of 0% to 100% (see chart below).

**Form Rating:** Plant’s habit or silhouette with respect to its chosen pruning system. Rated on a scale of 0% to 100% (see chart below).

#### Table of Values for Health, Structure, and Form Ratings:

Excellent	81%-100%
Good	61%-80%
Fair	41%-60%
Poor	21%-40%
Very Poor	6%-20%
Dead	0%-5%

**Condition Rating:** Combination of Health, Structure, and Form ratings. It may be either:

- 1) The lowest of the three;
- 2) The mean value of the three;
- 3) A weighted average of the three; or
- 4) Intuitively chosen by appraiser experience.

**Functional Limitations:** Depreciation from defects caused by a flaw in the materials or design of an element. Assessment of the interaction of tree species and site with respect to attributes that limit its function in the landscape. Attributes to consider may include: messy fruit, excessive height, inadequate spacing, and poor placement. Rated on a scale of 0% to 100% (see chart below)

**External Limitations:** Depreciation from factors external to the site and outside the control of the property owner. Such limitations may include: utility easement, water restrictions, or presence of a fatal pest in the area. Rated on a scale of 0% to 100% (see chart below)

**Table of Values for Functional and External Limitations:**

No impact on value	81%-100%
Minor impact	61%-80%
Moderate impact	41%-60%
Severe impact	21%-40%
Extreme impact	0%-20%

**Additional Costs:** Additional anticipated expenditures in reproducing the subject tree that were not included in the extrapolated unit cost. These may include cleanup, replacement tree installation, and aftercare.

**Total Cost:** The sum of the Depreciated Cost and the Total Additional Costs.

**Assignment Result:** Round Total Cost to 2-3 significant figures to show an implied level of precision.