# COMPLETE INVENTORY PROJECT > Data Collection Options

## ⑦ Tree Information

**Use this table to help guide your field data collection decisions:**
The Description column provides more information about each data variable. The extra model components shown in the right-hand columns require certain optional data to be collected. The optional data that must be collected for each extra model component are designated by an "x".

| Data Variables | | Description | Energy | Pests (IPED) |
|---|---|---|---|---|
| **Minimum required fields** | | | | |
| Species | | Identify and record the species and genus names of each tree | REQUIRED | |
| DBH | | Measure the tree stem diameter at breast height and record the measurement for each tree | REQUIRED | |
| **General site fields** | | | | |
| Strata | | Sub-units by which study area are divided for analysis (e.g., land use, neighborhood) | | |
| Land use | | Land use type in which tree is located | | |
| Status | | Status of tree as planted or self-seeded | | |
| GPS coordinates | | Longitude and latitude of tree | | |
| Street tree/non-street tree | | Identify if tree is a street tree or not (Y/N) | | |
| Public/private | | The classification of each tree as city managed (public) or not (private) | | |
| **Tree detail fields** | | | | |
| Total tree height | | Height from the ground to the top (alive or dead) of the tree | | |
| Crown size | Height to live top | Height from the ground to the live top of the tree | | |
| | Height to crown base | Height from the ground to the base of the live crown | | |
| | Crown width | The width of the crown in two directions: north-south and east-west | | |
| | Percent crown missing | Percent of the crown volume that is not occupied by branches and leaves | | |
| Condition & percent dieback | | Estimate of the percent of dieback (i.e., dead branches) in the crown recorded as it relates to condition for each tree | | |
| Crown light exposure | | Number of sides of the tree receiving sunlight from above (maximum of 5) | | |
| Energy | Direction | Direction from tree to the closest part of the building | x | |
| | Distance | Shortest distance from tree to the closest part of the building | x | |
| **Management fields** | | | | |
| Maintenance recommended | | User defined general maintenance recommendations (e.g. routine prune) for the tree | | |
| Maintenance task | | User defined priority maintenance tasks (e.g., pest treatment) for the tree | | |
| Sidewalk conflict | | Extent of damage to sidewalks from nearby trees defined by user | | |
| Utility conflict | | User defined potential or existing conflicts between tree branches and overhead utility lines | | |
| Pests (IPED) | Signs and symptoms of tree stress | Absence or presence of signs and symptoms of dieback, epicormic sprouts, wilted foliaged, environmental stress, or human stress | | x |
| | Signs and symptoms of foliage/twigs | Absence or presence of signs and symptoms of defoliation, discolored foliage, abnormal foliage, or insect signs and extent of foliage affected | | x |
| | Signs and symptoms of branches/bole | Absence or presence of signs and symptoms of insects or diseases on the branches/bole and location of signs or symptoms | | x |