

TREE INVENTORY ANALYSIS



TREES INVENTORIED

49,000

TOTAL LIVE TREES



TOP SPECIES

NORWAY MAPLE

9% OF ALL TREES



TOP SIZE CLASS

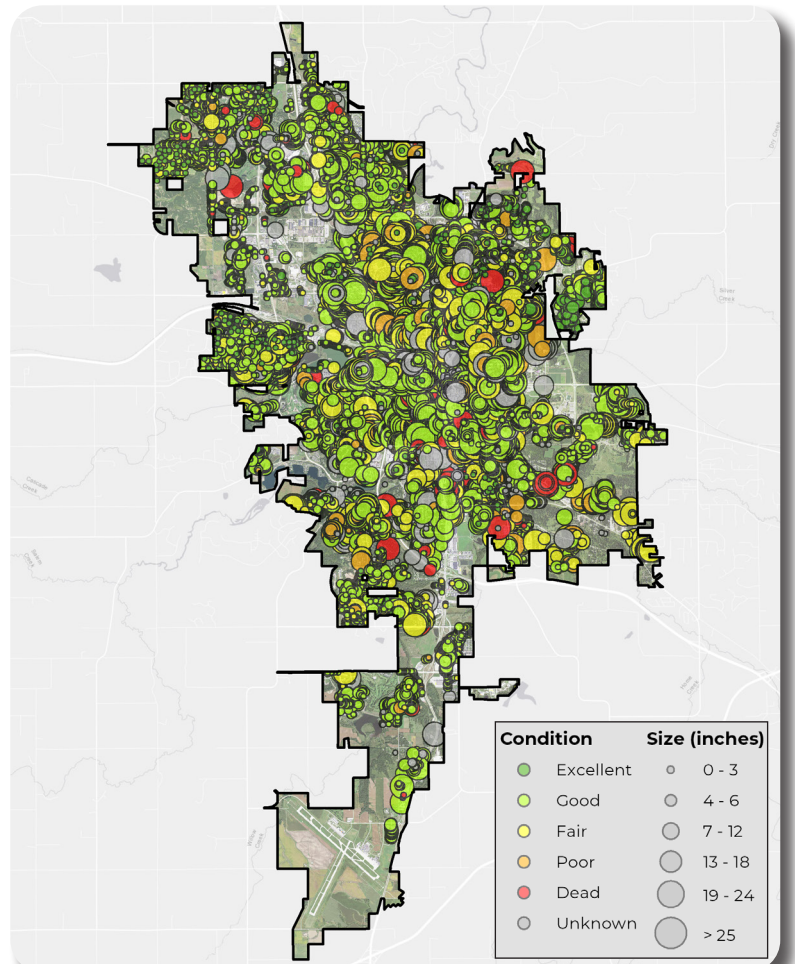
0-6 INCHES

49% OF ALL TREES

The urban forest in Rochester is a valuable asset that provides residents and visitors with many ecological, environmental, and community benefits. This assessment analyzed the City's existing urban forest composition, including the species diversity, age structure, and maintenance needs of individual trees. Data from several assessments dating back to 2002 and covering the full city boundary were assessed. The results, which are further described in the Urban Forest Master Plan Research Summary, provide the necessary information that the City can use to assign maintenance tasks that support the strategic preservation of existing trees and planting of new trees, and were incorporated in the primary framework of the Urban Forest Master Plan.

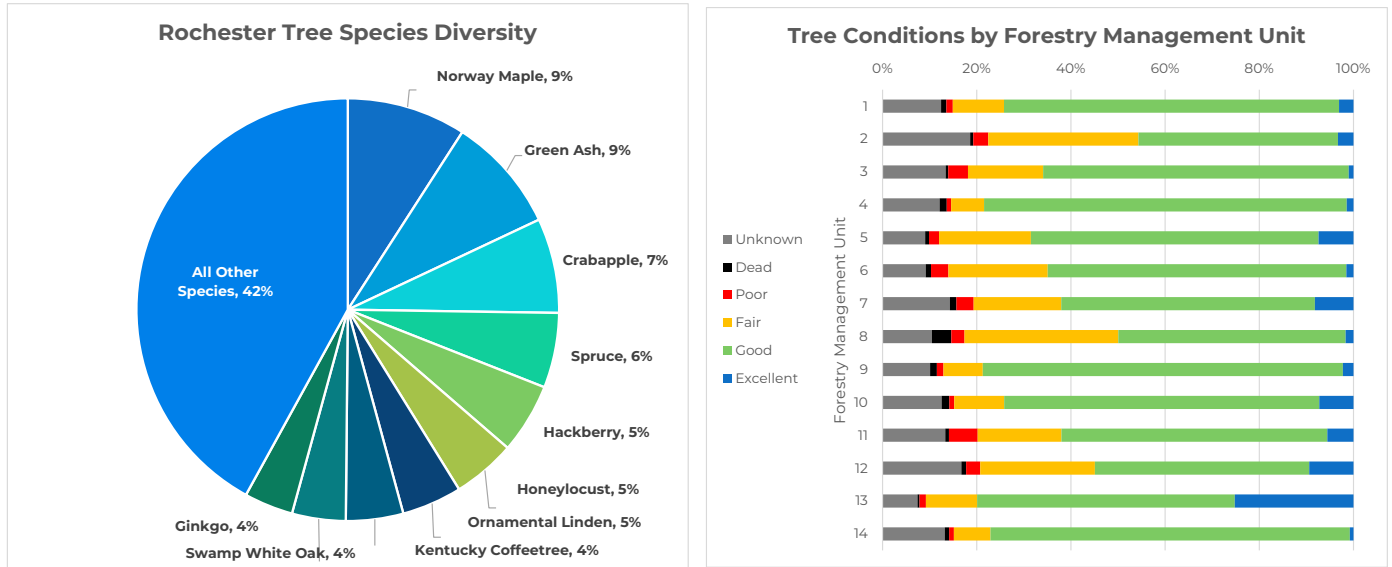
INVENTORY POINTS

Status	#	%
Live Tree	49,001	86%
Stump Removed	6,323	11%
Stump	1,359	2%
Unknown/Blank	273	0.5%
Planting Scheduled	221	0.4%
Marked For Removal	89	0.2%
Tree Removed	17	<0.1%
Grand Total	57,235	100%



Tree inventory data were analyzed for Rochester, Minnesota in 2020 as a part of the Urban Forest Master Plan project. Species, size, condition, and maintenance needs were assessed for each tree to reveal trends in the urban forest's composition and structure. A total of 86 unique tree species were identified in the inventory, with the top 10 most common species making up 58% of the total population. Norway maples (*Acer platanoides*) and green ash (*Fraxinus pennsylvanica*) were the most prevalent species, each comprising 9% of the total tree population. When evaluated at the genus level, maples (*Acer*) remained the most prevalent, comprising 21% of the total tree population. In addition to maples (*Acer*) exceeding the "10-20-30 rule" of no more than 10% of one species, 20% of one genus, or 30% of one family recommended to maintain a healthy species diversity, the amount of ash (*Fraxinus*) species (9%) is also a concern since ash trees are susceptible to major threats such as emerald ash borer (EAB).

TREE SPECIES DISTRIBUTION



Tree conditions were assessed by forestry management unit (FMU) and results indicated that tree health varied by location. FMU 8 had the highest proportion of dead trees whereas FMU 13 had the highest proportion of trees in good or excellent condition. The size structure of Rochester's urban forest was also analyzed and reflects an industry standard "ideal" distribution, which states that the majority of trees (40%) should be in the smallest size class. With 49% of its trees falling into the 0-6 inch size class, Rochester exceeds this target and is protected from the surge of canopy loss as its larger, mature trees continue to age and reach a natural stage of senescence or decline.

TREE SIZE DISTRIBUTION

