CHARLOTTESVILLE, VIRGINIA

A FORECAST ANALYSIS OF POSSIBLE PLANTING SCENARIOS

The forest of Charlottesville offers a lot more than greener views and patches of shade. It creates meaningful environmental, economic, and social benefits for the community, valued at almost $16 million/year. In 2020, a Tree canopy assessment was undertaken to better understand the composition of the City's canopy infrastructure. This assessment identified tree canopy, possible planting area (PPA), and areas unsuitable for planting. It analysed how they are currently distributed throughout the city. The results will allow the City to revise existing strategies and develop new ones to protect and expand the tree canopy.

Building upon the results of this assessment, the aim of this summary report is to analyze and communicate the effects of various planting strategies on Charlottesville's future canopy resource. Four scenarios were chosen (see results table below) to illustrate how Charlottesville's canopy cover could shift over a time period from now (2023) to 2050. The results presented for each scenario may be used as guidelines to inform the scale and methods of future planting efforts.

38% TREE CANOPY

22% POSSIBLE PLANTING AREA

36% TOTAL IMPERVIOUS AREA

**Charlottesville's 2023 canopy cover is an assumption based on 2020 canopy data and input from ReLeaf Cville.*

7,006	TOTAL ACRES
6,980	LAND ACRES
46,553	RESIDENTS

ANNUAL TREE PLANTING REQUIRED FOR EACH SCENARIO

500	BUSINESS AS USUAL
2,572	MAINTAIN EXISTING UTC %
3,697	ATTAINABLE GROWTH
4,500	AGGRESSIVE GROWTH

Planting **2,572 trees per year** will maintain the citywide canopy cover, and any additional plantings will increase citywide canopy.

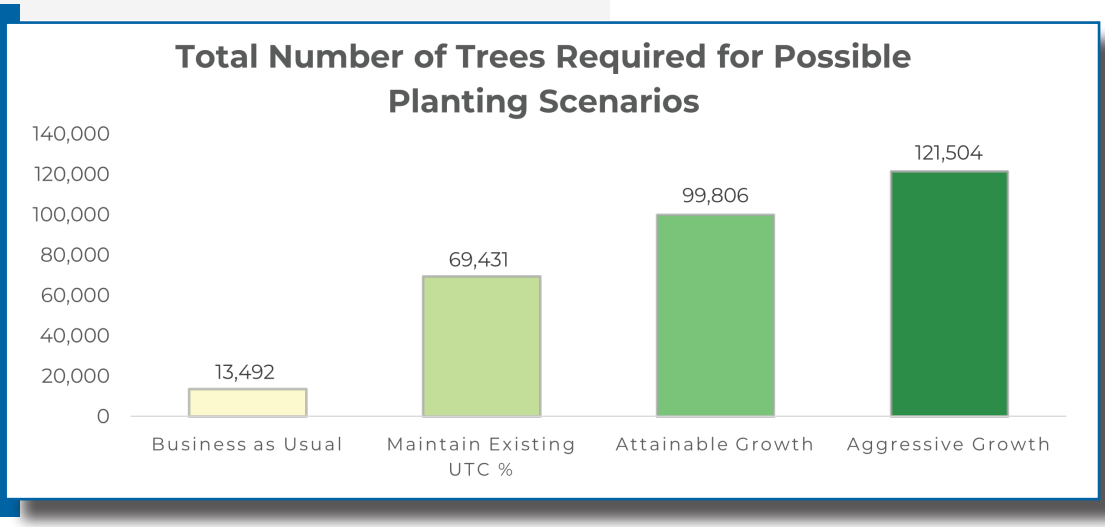

Figure 1. The total number of tree plantings required over the next 27 years for each of the scenarios.