

Trees provide many benefits to communities:

- energy savings
- air quality improvements
- storm water management
- property values
- quality of life



Specific examples:



Chicago's 3.6 million trees reduce air pollution by almost 900 tons each year



Sacramento homeowners save \$25 on electricity bills each summer by planting trees on the west and south sides of their homes



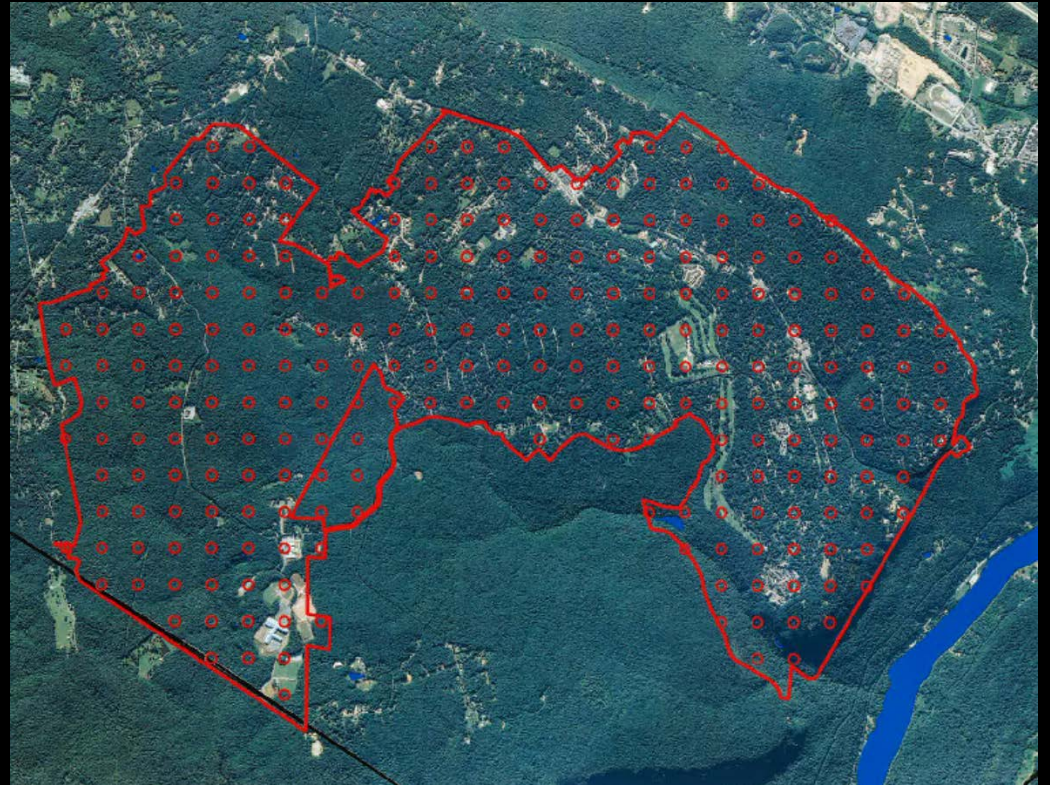
Street trees add \$9,000 to home values in Portland, Oregon

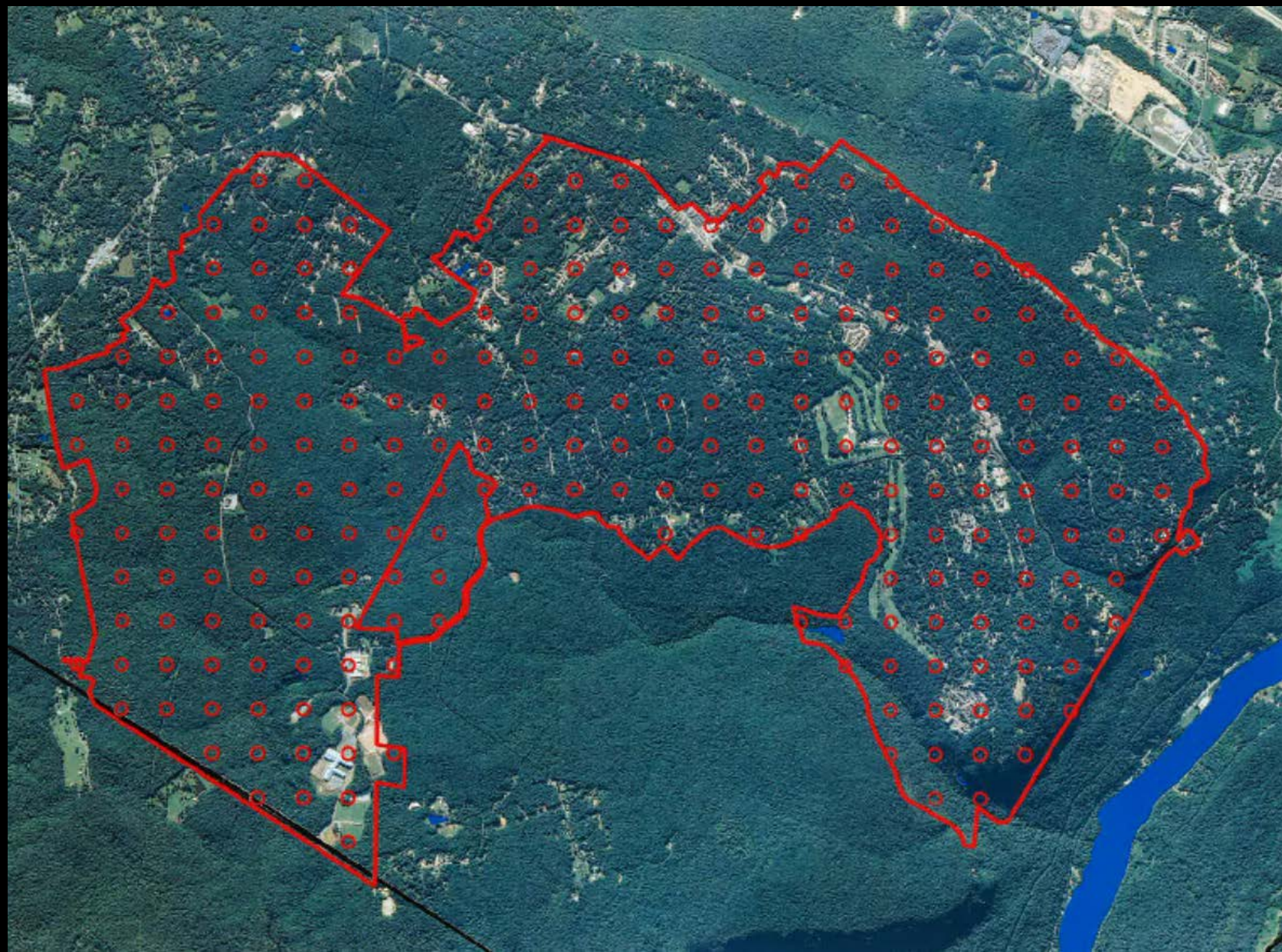
Trees add significant beauty and other benefits to Signal Mountain



Our tree canopy analysis:

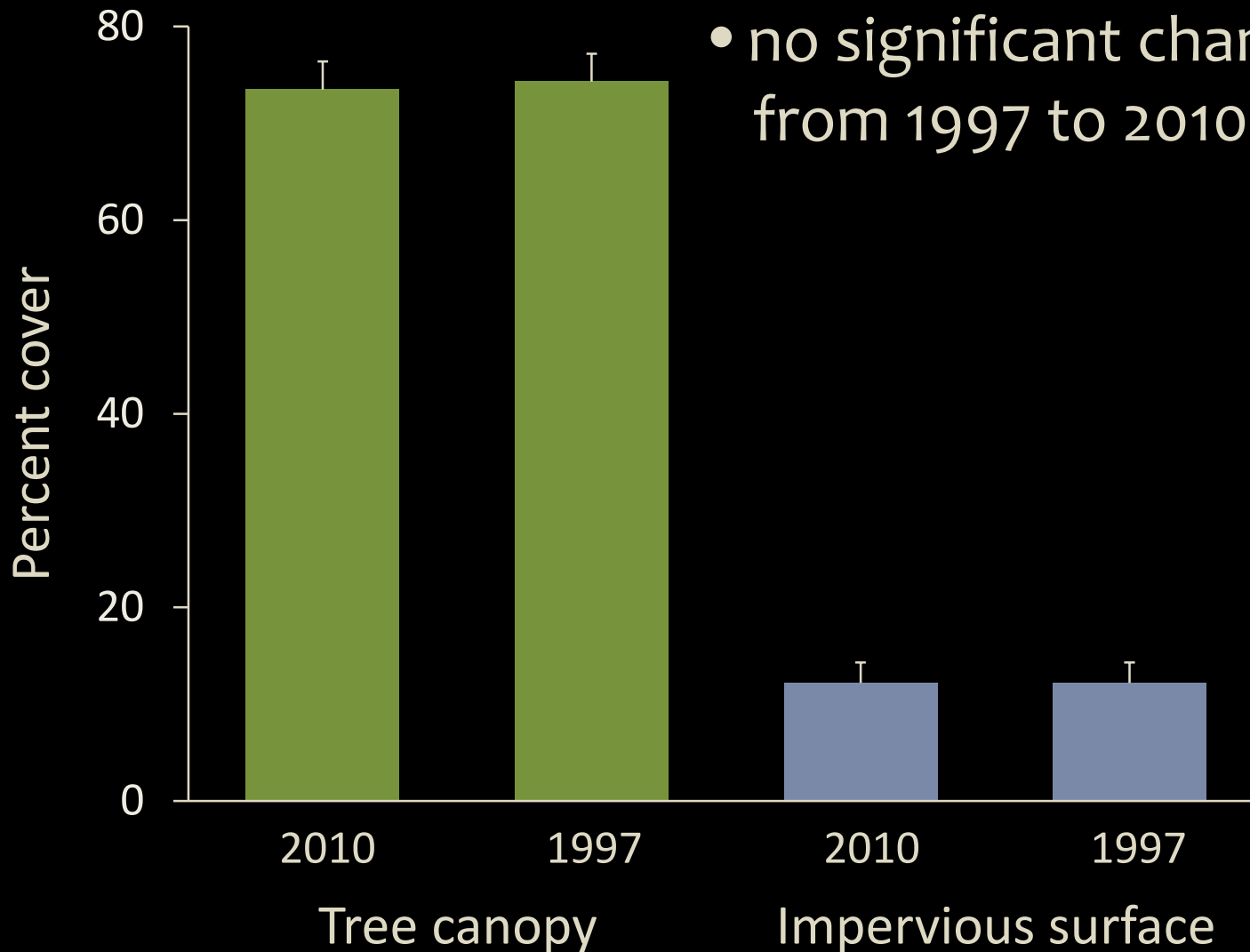
- by TN Division of Forestry
- 1997 and 2010 aerial photos taken
- 5,500-acre area included
- canopy evaluated in 245 locations (denoted by dots)
- GIS software used





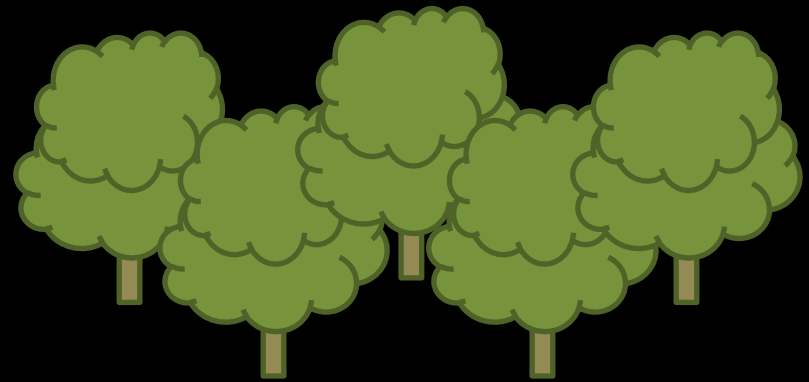
Results:

- 2010 tree canopy = 73.5%
- 2010 impervious surface = 12.2%
- no significant changes from 1997 to 2010



What is our tree canopy worth?

- 1% of Signal Mountain = 55 acres
- 1 full-canopy acre = 50 trees



$1\% \text{ of Town} = 55 \text{ acres} \times 50 \text{ trees/acre} = 2,750 \text{ trees}$

$2,750 \text{ trees} \times \$70/\text{tree} = \$192,500$

$73.5\% \text{ of Town} \times \$192,500/1\% = \$14,148,750$

Recommendations:

- maintain our current 'excellent' canopy
- manage development to preserve trees
- identify plantable spaces to remediate losses

