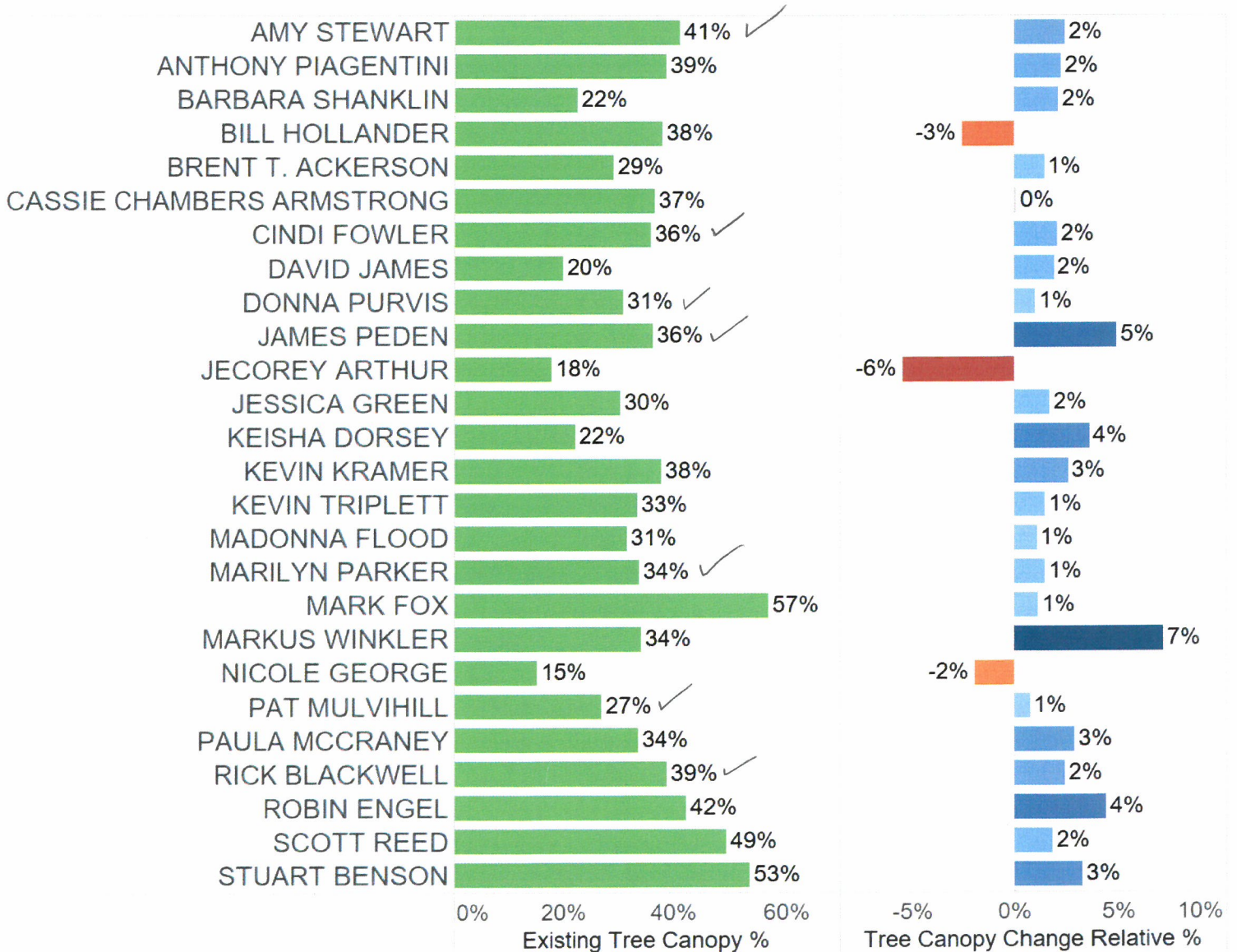


# Louisville Tree Canopy Change

## Council Districts



The Louisville Tree Canopy Assessment mapped tree canopy change over a seven-year period from 2012-2019. This information was then summarized by Council Districts. The chart below shows the percent of land in each district covered by tree canopy in 2019 (left) as compared to the percent change in tree canopy from 2012-2019 (right). Percent change is calculated using the formula  $(2019-2012)/(2012)$ . Higher values (blue) indicate an increase in tree canopy. Lower values (orange) indicate that the district experienced a decline in tree canopy.



The Louisville Tree Canopy Assessment was carried out by the University of Vermont Spatial Analysis Laboratory in collaboration with Tree Louisville using techniques approved by the US Forest Service.

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TreesLouisville  
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# 2022 Louisville Urban Tree Canopy Assessment Summary



This study was carried out by the University of Vermont Spatial Analysis Lab in collaboration with TreesLouisville and was conducted using 2012-2019 canopy data from the Louisville/Jefferson County Information Consortium (LOJIC) and the USDA. This report is a follow-up to the 2015 assessment, which examined canopy changes between 2004-2012. \*

**39%**

tree canopy coverage as of 2019

**9,591 acres of canopy gain**

**7,365 acres of canopy loss**

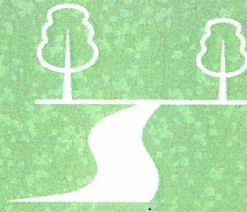
**1%**

absolute change in tree canopy from 38% in 2012 to 39% in 2019

## STUDY HIGHLIGHTS



Slight overall canopy gain of 1% between 2012-2019



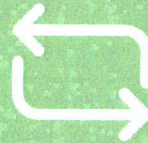
Street tree canopy increased by 2%



Trees planted over a decade ago experienced considerable growth, contributing to increase



Canopy loss is concentrated in more heavily urbanized areas and on private land



Although canopy coverage is holding steady, there are still considerable losses throughout Louisville



Tree canopy will likely continue to rise if removals do not outpace natural growth and new plantings

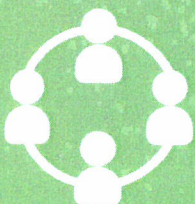
## RECOMMENDATIONS



Preserving existing canopy is the most effective means for securing future tree canopy



Having trees with a broad age distribution and a variety of species will ensure that a robust and healthy tree canopy is possible over time



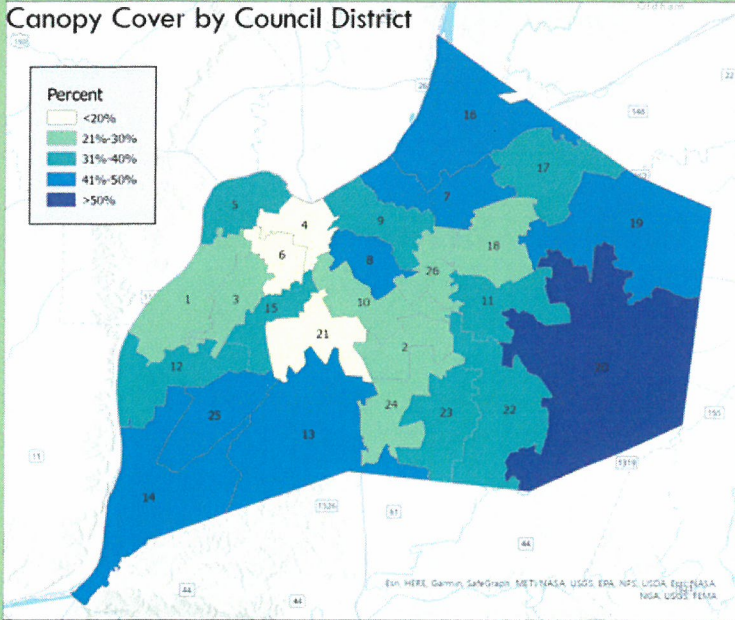
Community education is crucial: residents that are knowledgeable about the value and services trees provide will help Louisville stay green for years to come



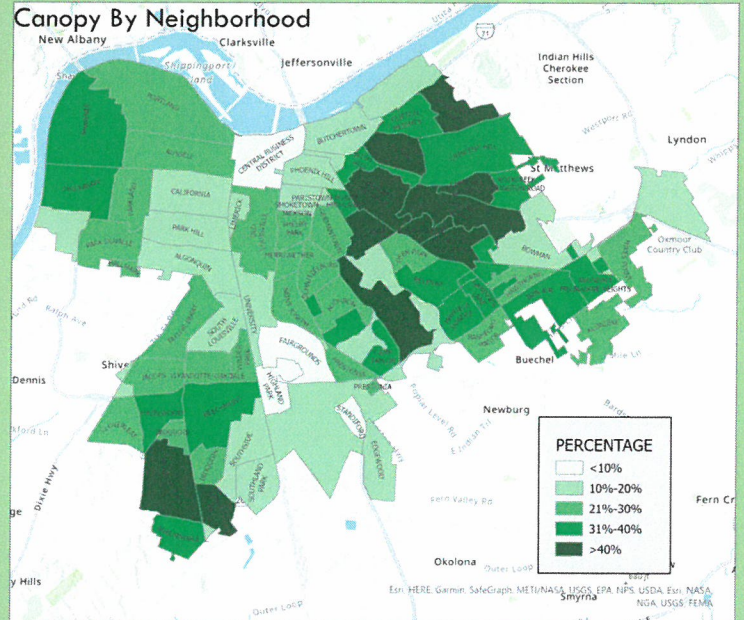
Plant new trees in areas where tree canopy is low or in locations where there has been canopy loss



# A Closer Look at the Data



Highest:		Lowest:	
District 20	52%	District 4	15%
District 14	50%	District 21	16%
District 13	48%	District 6	19%
District 16	46%	District 10	26%



Highest:		Lowest:	
Iroquois Park	71%	Standiford	3%
Cherokee Seneca	53%	Highland Park	5%
Cherokee Gardens	51%	Fairgrounds	6%
Kenwood Hill	48%	Central Bus. District	8%
Brownsboro Zorn	46%	University District	11%

## LAND USE AND CANOPY CHANGE

Single-Family Residential property experienced the greatest changes (both losses and gains) compared to Commercial, Industrial, Public Right-of-Way and other land uses in Louisville.



**+ 30,000 acres** of plantable space on single-family residential property

## WHY TREE CANOPY IS IMPORTANT FOR LOUISVILLE

### Urban Heat Island

Louisville has been identified as one of the fastest growing and most intense heat islands in the country. Trees provide heat mitigation through shade and transpiration.

### Stormwater Mitigation

Increasing amounts of stormwater overwhelming sewers are causing sewage overflows and waterway pollution. Trees can intercept and absorb hundreds of gallons of water, reducing runoff.

### Quality of Life

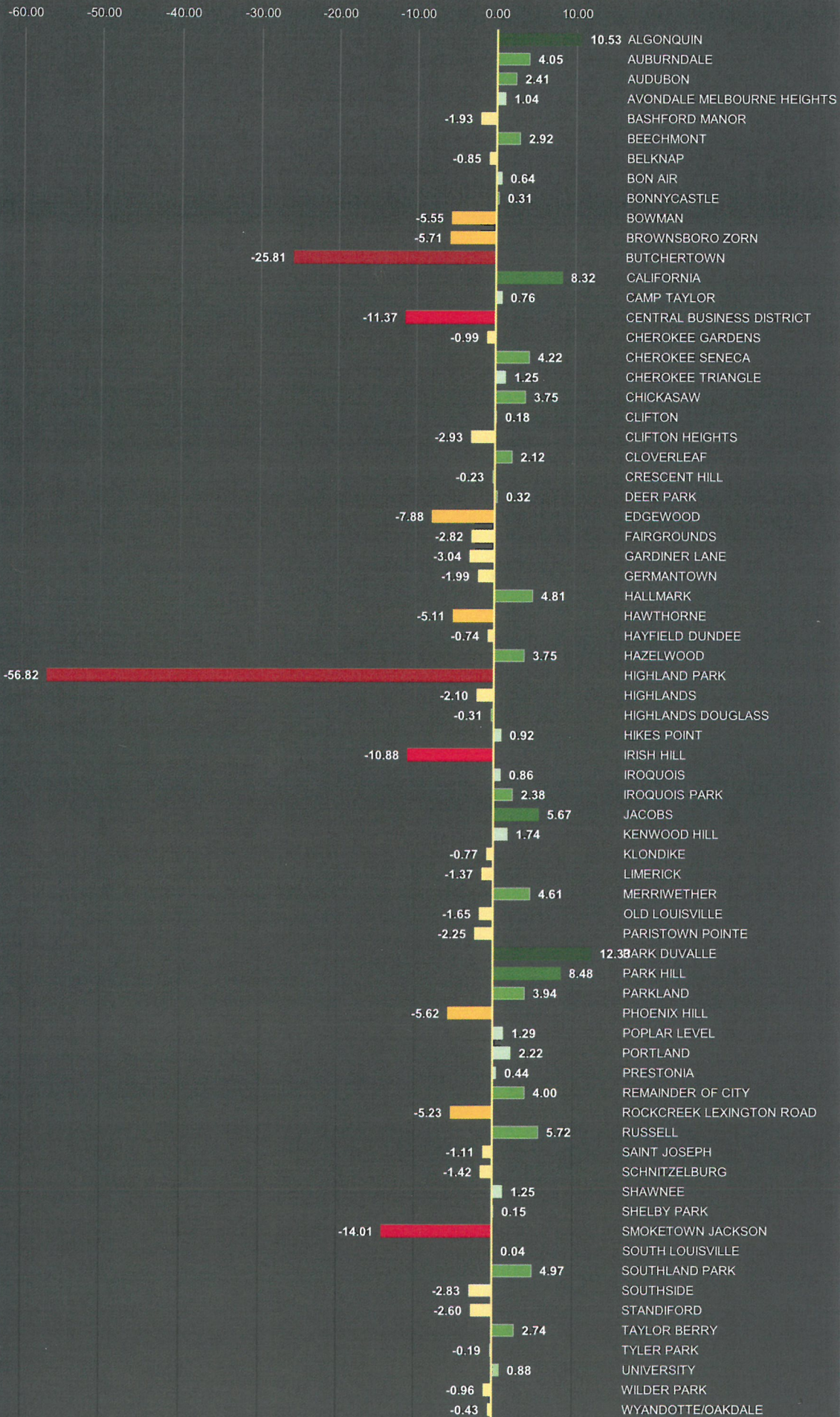
Trees provide a multitude of mental, physical, social and economic benefits that make Louisville a healthier, happier and more resilient city.

\* A vital component of the Tree Canopy Assessment Protocols is ensuring that changes in tree canopy are attributed to actual gains and losses in tree canopy as opposed to differences in the source data. The 2012 and 2019 datasets were acquired with different specifications than data used for the 2004-2012 assessment. This assessment was completed independently of prior tree canopy assessments for Jefferson County, and methodologies are not directly comparable. Great care was put into resolving the differences in the data to ensure that tree canopy change between 2012 and 2019 reflected an actual change in the canopy as opposed to differences in the source data.





# Louisville Metro Neighborhoods - Change In Tree Canopy 2012-2019



### Neighborhood Tree Canopy Change 2012-2019

