

# URBAN TREE CANOPY REPORT CARDS

LEXINGTON, KENTUCKY  
AUGUST | 2022



**PLANIT GEO**  
mapping a greener future



# TREE CANOPY REPORT CARDS

The urban forest of Lexington-Fayette County's Urban Service Area (USA) offers a lot more than greener views and patches of shade. It creates meaningful environmental, economic, and social benefits for the community, valued at \$6.5 million/year in addition to the over \$111 million in stored carbon. To better understand this essential infrastructure, this assessment evaluated urban tree canopy (UTC), possible planting area (PPA), and tree canopy change. It analyzed how they are currently distributed as well as how their distribution has changed over time throughout the USA's complete boundary and city council districts.

## ASSESSMENT LEVELS

To best inform Lexington-Fayette County's various stakeholders, urban tree canopy and other associated metrics were tabulated across the entire Urban Service Area (USA) and throughout each of the 12 city council districts.

## DATA SOURCES

Tree canopy and land cover data from the EarthDefine US Tree Map (<https://www.earthdefine.com/treemap>) provided a five-class land cover data set. The US Tree Map is produced using a modern machine learning technique to extract tree canopy cover and other land cover types from the latest available imagery. This assessment utilized high-resolution (60-centimeter) multispectral imagery from the U.S. Department of Agriculture's National Agriculture Imagery Program (NAIP) collected in 2020 to derive the land cover data set. The NAIP imagery was used to classify all types of land cover.

Using the best available science from i-Tree tools, values were calculated for some of the benefits and functions provided by the urban tree canopy in Lexington. The urban forest holds millions of dollars of savings in avoided infrastructure costs, pollution reduction, and stored carbon. The following canopy values were calculated using the USDA Forest Service's i-Tree Landscape tool with Lexington's total acres of urban tree canopy as well as the total acres of urban tree canopy in each city council district as the input data. The results from this assessment will help concentrate efforts in areas with the greatest need, where tree planting space is available, and where benefits can be realized.

## CITYWIDE LAND COVER SUMMARY

**23%**    **33%**    **44%**    **+3%**

URBAN TREE CANOPY    POSSIBLE PLANTING AREA    UNSUITABLE AREAS    CANOPY CHANGE 2012 - 2020

## LEXINGTON-FAYETTE



54,055 LAND ACRES  
322,570 RESIDENTS

## URBAN TREE CANOPY



2012: 10,914 ACRES  
2020: 12,649 ACRES

## ECOSYSTEM BENEFITS



ANNUAL BENEFITS: \$6,504,332  
STORED CARBON BENEFITS: \$111,512,171

## CITY COUNCIL DISTRICT'S URBAN TREE CANOPY %

- DISTRICT 1: 19%
- DISTRICT 2: 18%
- DISTRICT 3: 26%
- DISTRICT 4: 28%
- DISTRICT 5: 30%
- DISTRICT 6: 20%
- DISTRICT 7: 19%
- DISTRICT 8: 27%
- DISTRICT 9: 27%
- DISTRICT 10: 28%
- DISTRICT 11: 23%
- DISTRICT 12: 23%

# GRADING CRITERIA, CALCULATIONS, AND SCALE EXPLANATIONS

Grades were provided for the USA and each city council district to reflect how they scored in five criteria. The criteria reflected the canopy's environmental and economic benefits. The collective scores were then reported as a final letter grade for each area of interest. Grades were calculated using identical methods as the previous report cards from 2015, but council district boundaries have changed which makes true comparison of assigned grades difficult. Data from tables on page four were utilized to calculate final grades for each district. Note: The last row (Tables 2 and 3) is not a sum but the total USA boundary. The combined city council district boundaries do not cover the entirety of the city boundary, and therefore, city council district values are less than the citywide totals.

## **Current Canopy** = *EXISTING CANOPY / CANOPY GOAL*

Lexington is the oldest Tree City USA in Kentucky and prioritizes the growth and maintenance of their urban canopy. Lexington-Fayette County set a canopy goal of 30% citywide UTC cover. Urban tree canopy cover percentages are based on total land area. City council districts were scored based on how close they came to the 30% UTC goal. Although only one district has met that goal, 11 of the 12 districts had growths in canopy from 2012 to 2020.

A score of 97 is an A+; 93-96 is an A; 90-92 is an A-; 87-89 is a B+; 83-86 is a B; 80-82 is a B-; 77-79 is a C+; 73-76 is a C; 70-72 is a C-; 67-69 is a D+; 63-66 is a D; 60-62 is a D-; and less than 60 is an F.

## **Potential Canopy** = *EXISTING CANOPY ACRES / MAXIMUM CANOPY POSSIBLE*

Districts were also scored on their potential plantable areas. Existing canopy acres and possible planting area acres were combined to determine maximum canopy possible. Maximum canopy possible percentages are based on total land area. Council districts that have utilized a larger portion of their maximum possible canopy ranked higher than those that still have a large gap between their total plantable space and existing urban tree canopy. Underutilized PPA in this category leads to a lower score.

A score of 85 is an A+; 80-85 is an A; 75-79 is an A-; 70-74 is a B+; 65-69 is a B; 60-64 is a B-; 55-59 is a C+; 50-54 is a C; 45-49 is a C-; 40-44 is a D+; 35-39 is a D; 30-34 is a D-; than 30 is an F.

## **Stormwater Control** = *ACRES OF PERVIOUS LAND / ACRES OF IMPERVIOUS LAND*

Trees and vegetation mitigate stormwater runoff which minimizes flood risk, stabilizes soil, reduces sedimentation in streams and riparian land, and absorbs pollutants, thus improving water quality and habitats. Trees are integral in managing stormwater, specifically compared to impervious surfaces such as sidewalks and roads. Districts were scored by assessing the ratio of pervious surface cover compared to impervious land cover. Districts with a higher ratio of pervious surfaces will rank higher.

A score of 5 is an A+; 4.75-4.99 is an A; 4.50-4.74 is an A-; 4.25-4.49 is a B+; 4.00-4.24 is a B; 3.75-3.99 is a B-; 3.50-3.74 is a C+; 3-3.5 is a C; 2.50-3.00 is a C-; 2.25-2.49 is a D+; 2.00-2.24 is a D; 1.50-1.99 is a D-; and less than 1.50 is an F.

## **Heat Mitigation** = *ACRES OF IMPERVIOUS LAND / EXISTING CANOPY ACRES*

Unshaded impervious surfaces absorb and retain heat and experience much warmer temperatures than nearby vegetated areas creating an unhealthy living environment for nearby residents. This is often referred to as the urban heat island effect. Tree canopy can mitigate the effects of urban heat island by providing shade, deflecting radiation, releasing moisture, and absorbing air pollution. Districts were scored based on their ratio of impervious land area compared to tree canopy area.

A score of 0.10-0.19 is an A+; 0.20-0.29 is an A; 0.30-0.39 is an A-; 0.40-0.49 is a B+; 0.50-0.59 is a B; 0.60-0.69 is a B-; 0.70-0.79 is a C+; 0.80-0.89 is a C; 0.90-0.99 is a C-; 1.00-1.09 is a D+; 1.10-1.19 is a D; 1.20-1.29 is a D-; and 1.30 or higher is an F.

**Canopy Value** = TOTAL CANOPY VALUE OF EACH DISTRICT/TOTAL ACRES

Trees accumulate carbon in their biomass; with most species in a forest, the rate and amount increase with age. Trees produce oxygen, indirectly reduce pollution by lowering air temperature, and improve public health by reducing air pollutants which cause death and illness. The total monetary value of benefits provided by Lexington’s trees was calculated via the USDA Forest Service’s i-Tree Landscape tool. The total canopy value was calculated by adding the annual value and carbon storage value for each district.

A score above \$1,188 is an A+; \$1,187-\$1,126 is an A; \$1,125-\$1,063 is an A-; \$1,062-\$1,001 is a B+; \$1000-\$913 is a B; \$912-\$838 is a B-; \$837-\$751 is a C+; \$750-\$663 is a C; \$662-\$588 is a C-; \$587-\$501 is a D+; \$500-\$376 is a D; \$375-\$251 is a D-; below \$250 is an F.

**Final Grade Calculations**

The five categories were equally weighted with a point grading system to calculate a final letter grade. Districts received points based on their letter grade in each category. A letter grade of A or A+ is awarded 4.00 points, A- is 3.67 points, B+ is 3.30 points, B is 3.00 points, B- is 2.70 points, C+ is 2.30 points, C is 2.00 points, C- is 1.4 points, D+ is 1.30 points, D is 1.00 points, D- is 0.7 points, and F is 0.0 points. The points for each category were totaled and then divided by five (the number of categories) to get an averaged point score. The final letter grade was awarded based on the averaged point score.

**Table 1 . Detailed explanation of City Council District 1 final grade.**

Category	Grade	Points awarded
Current Canopy	D	1.0
Potential Canopy	D+	1.3
Stormwater Control	F	0.0
Heat Mitigation	F	0.0
Canopy Value	A+	4.0

Total points	Number of categories	Averaged point score	Final letter grade
6.3	5	1.26	D



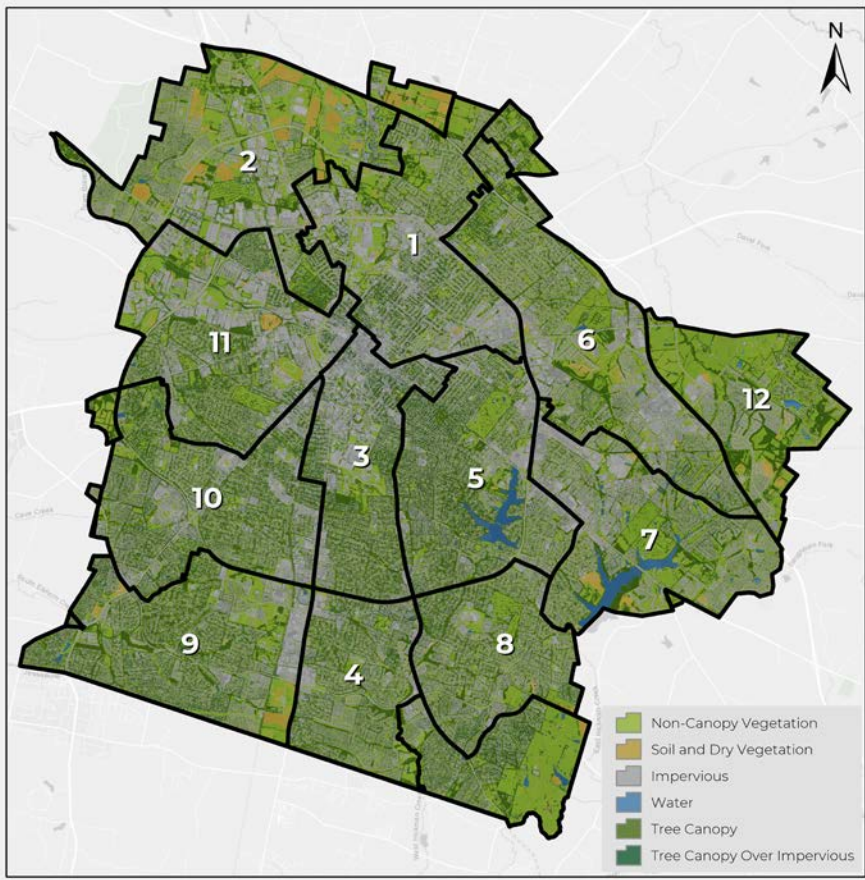
Table 2 . Grading criteria for Lexington’s city council districts and USA boundary.

City Council District	Total Area (Acres)	Land Area (Acres)	Existing Canopy (Acres)	PPA Ares (Acres)	Existing canopy (%)	Canopy Goal (%)	Maximum Canopy Possible (%)	Total Pervious Area (Acres)	Total Impervious Area (Acres)	Total Canopy Value (\$)
1	4,806	4,806	912	1,412	19	30	48	2,306	2,500	8,513,594
2	5,923	5,897	1,037	2,221	18	30	55	3,719	2,178	9,679,343
3	3,260	3,259	859	685	26	30	47	1,418	1,841	8,009,853
4	2,814	2,807	790	818	28	30	57	1,560	1,247	7,373,275
5	4,461	4,287	1,290	1,061	30	30	55	2,274	2,013	12,032,484
6	5,238	5,219	1,019	1,778	20	30	54	2,839	2,380	9,507,845
7	4,426	4,173	801	1,421	19	30	53	2,354	1,819	7,476,338
8	3,056	3,050	825	966	27	30	59	1,777	1,273	7,696,575
9	4,756	4,740	1,277	1,517	27	30	59	2,771	1,969	11,909,874
10	4,685	4,673	1,317	1,219	28	30	54	2,395	2,278	12,289,927
11	4,930	4,917	1,118	1,355	23	30	50	2,507	2,410	10,433,319
12	6,284	6,219	1,400	3,212	23	30	74	4,829	1,390	13,061,716
<b>USA</b>	<b>54,648</b>	<b>54,055</b>	<b>12,649</b>	<b>17,668</b>	<b>23</b>	<b>30</b>	<b>56</b>	<b>30,758</b>	<b>23,297</b>	<b>118,016,503</b>

Table 3 . Grading criteria for Lexington’s city council districts and USA boundary continued.

City Council District	Current Canopy Score	Current Canopy Grade	Potential Canopy Score	Potential Canopy Grade	Storm Water Control	Storm water Control Grade	Heat Mitigation Score	Heat Mitigation Grade	Canopy Value Score	Canopy Value Grade	Final Score	Final Grade
1	63%	D	40%	D+	0.92	F	2.74	F	1,771	A+	1.26	D
2	60%	D-	33%	D-	1.71	D-	2.10	F	1,634	A+	1.22	D
3	87%	B+	55%	C+	0.77	F	2.14	F	2,457	A+	1.92	C-
4	93%	A	49%	C-	1.25	F	1.58	F	2,620	A+	1.88	C-
5	100%	A+	55%	C+	1.13	F	1.56	F	2,697	A+	2.06	C
6	67%	D+	37%	D	1.19	F	2.34	F	1,815	A+	1.26	D
7	63%	D	36%	D	1.29	F	2.27	F	1,689	A+	1.2	D
8	90%	A-	46%	C-	1.40	F	1.54	F	2,519	A+	1.82	C-
9	90%	A-	46%	C-	1.41	F	1.54	F	2,504	A+	1.82	C-
10	93%	A	52%	C	1.05	F	1.73	F	2,623	A+	2	C
11	77%	C+	46%	C-	1.04	F	2.16	F	2,116	A+	1.54	C-
12	77%	C+	31%	D-	3.47	C	0.99	C-	2,079	A+	2.08	C
<b>USA</b>	<b>77%</b>	<b>C+</b>	<b>41%</b>	<b>D+</b>	<b>1.32</b>	<b>F</b>	<b>1.84</b>	<b>F</b>	<b>2,160</b>	<b>A+</b>	<b>1.52</b>	<b>C-</b>

# OVERALL CANOPY IN LEXINGTON'S URBAN SERVICE AREA



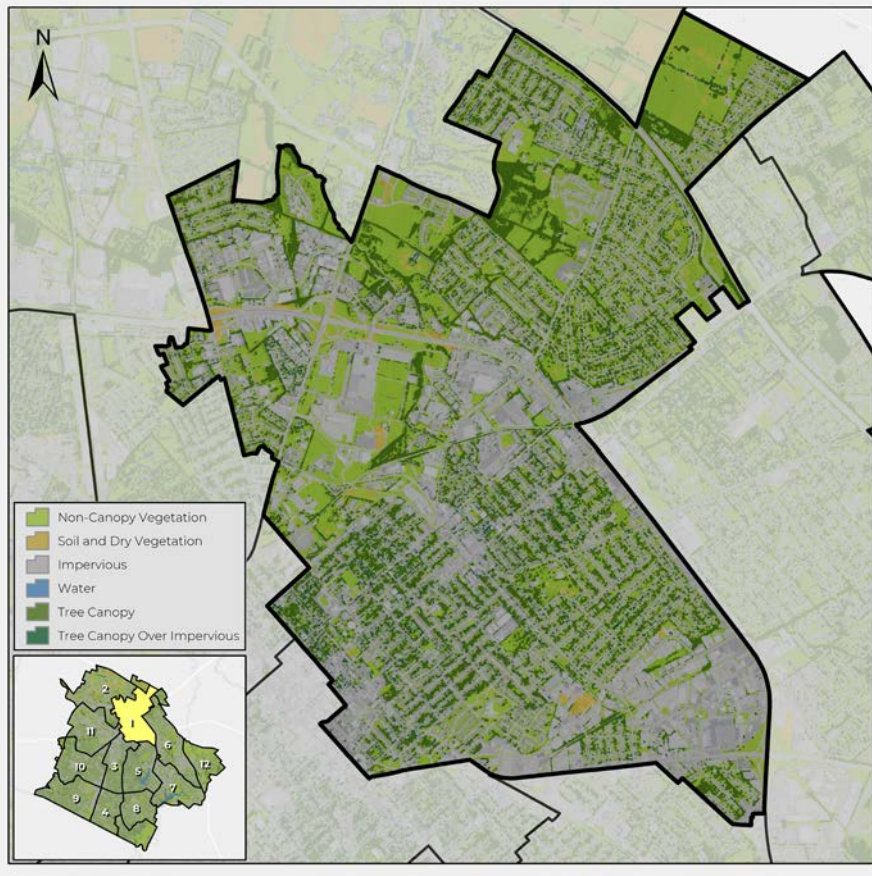
**OVERALL GRADE:**

**C-**

Lexington-Fayette County's Urban Service Area contains 12,649 acres of urban tree canopy and 17,668 acres of possible plantable space. The City can utilize the results of this study to identify the best locations on City-owned and private property to focus on future tree planting and canopy expansion efforts.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	The USA contained 23% UTC. The USA has not yet achieved its goal of 30% citywide canopy cover.	<b>C+</b>
<b>POTENTIAL CANOPY</b>	The USA contained 33% PPA, which could bring its total canopy cover to 56% if all plantable space is utilized.	<b>D+</b>
<b>STORMWATER CONTROL</b>	Lexington's trees absorb 113 million gallons of water per year, providing over \$1 million in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	Lexington-Fayette County had 23,297 acres of impervious land cover and only 12,649 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	Lexington's trees provide over \$111 million in annual benefits, or \$2.1k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 1



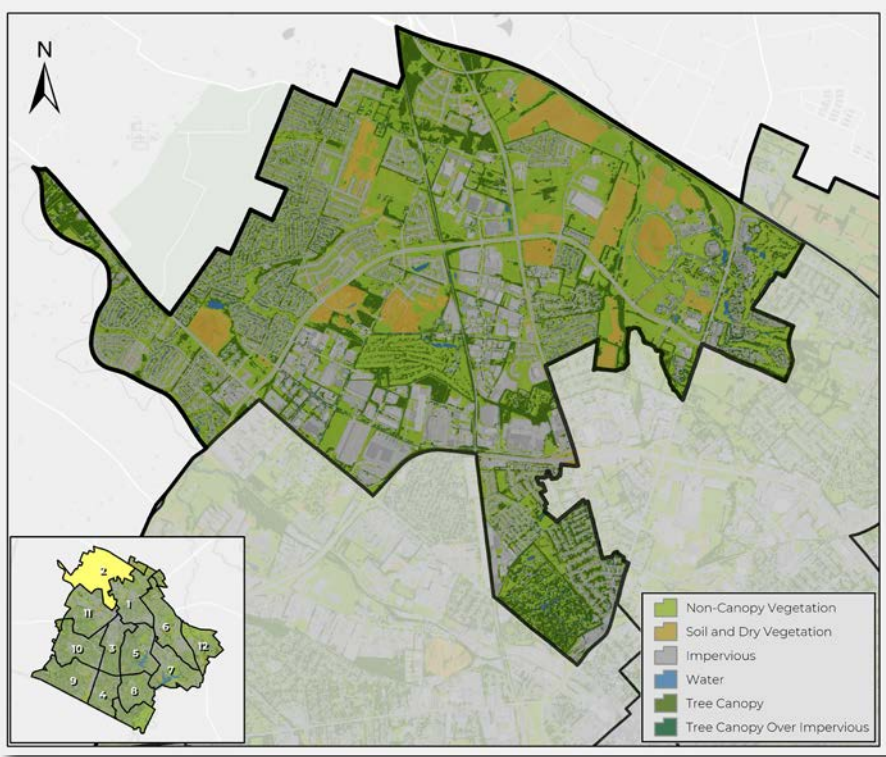
**OVERALL GRADE:**

**D**

City Council District 1 was the only district that lost canopy between 2012 and 2020. This district also has the highest amount of impervious land cover. District 1 should plant in parking lots or in the right-of-way to help mitigate stormwater runoff and minimize the urban heat island effect.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 1 had the second lowest percent of UTC with 19%. District 1 has not yet achieved its UTC goal of 30%.	<b>D</b>
<b>POTENTIAL CANOPY</b>	District 1 contained 29% PPA, which could bring its total canopy cover to 48% if all plantable space is utilized.	<b>D+</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 12 million gallons of water per year, providing over \$109K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 2,500 acres of impervious land cover and only 912 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 1 trees provide over \$8.5 million in annual benefits, or \$1.7k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 2



**OVERALL GRADE:**

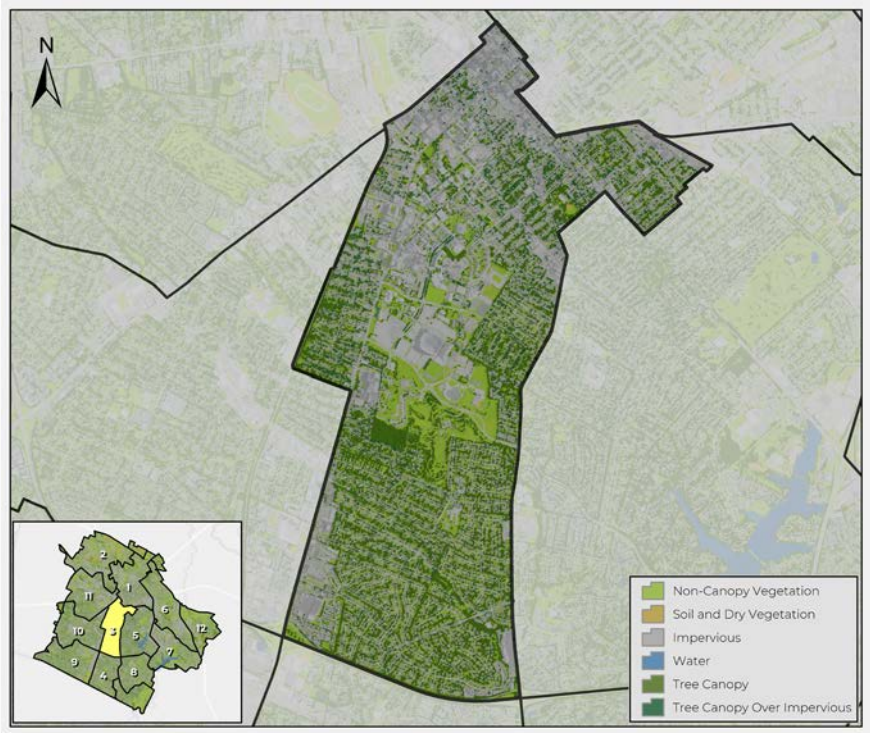
**D**

City Council District 2 had the lowest percentage of UTC with 18%. However, it did contain the second highest PPA throughout the districts at 38%, or 13% of the total citywide PPA.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 2 had the lowest percent of UTC with 18%. District 2 has not yet achieved its UTC goal of 30%.	<b>D-</b>
<b>POTENTIAL CANOPY</b>	District 2 contained 38% PPA, which could bring its total canopy cover to 55% if all plantable space is utilized.	<b>D-</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 14 million gallons of water per year, providing over \$124K in annual stormwater benefits.	<b>D-</b>
<b>HEAT MITIGATION</b>	This district had 2,178 acres of impervious land cover and only 1,037 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 2 trees provide over \$9.6 million in annual benefits, or \$1.6k per acre.	<b>A+</b>



# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 3



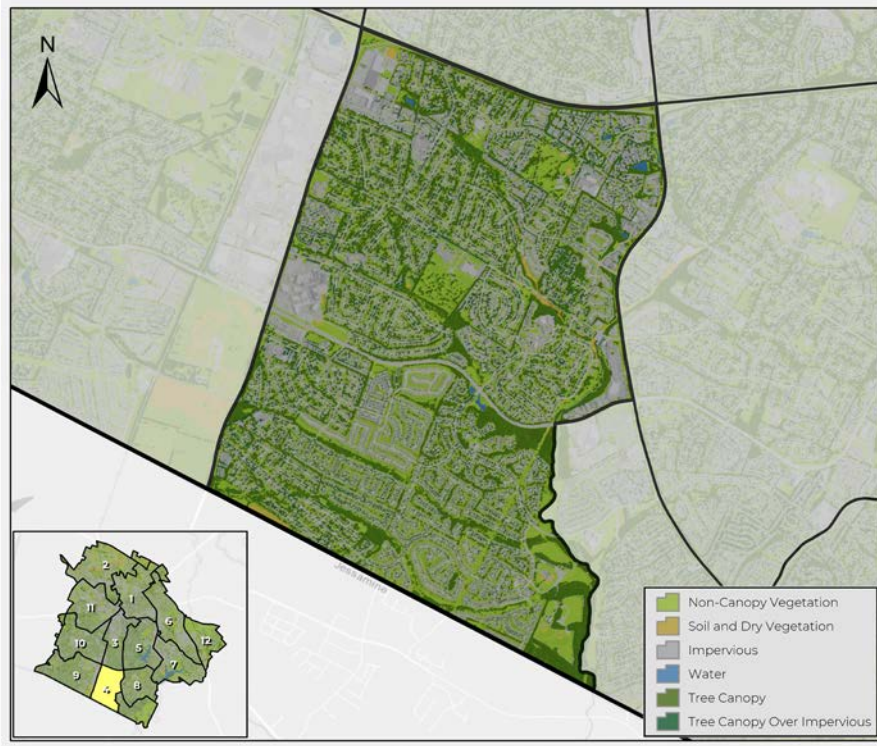
**OVERALL GRADE:**

**C-**

City Council District 3 had a 3% increase in canopy between 2012 and 2020 and had a canopy cover of 26%. This district also has more impervious than pervious land cover. District 3 should plant in parking lots or in the ROW to help mitigate stormwater runoff and minimize the urban heat island effect.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 3 contained 26% UTC, which is approaching the goal of 30% district wide canopy cover.	<b>B+</b>
<b>POTENTIAL CANOPY</b>	District 3 contained 21% PPA, which could bring its total canopy cover to 47% if all plantable space is utilized.	<b>C+</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 12 million gallons of water per year, providing over \$103K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 1,841 acres of impervious land cover and only 859 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 3 trees provide over \$8 million in annual benefits, or \$2.4k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 4



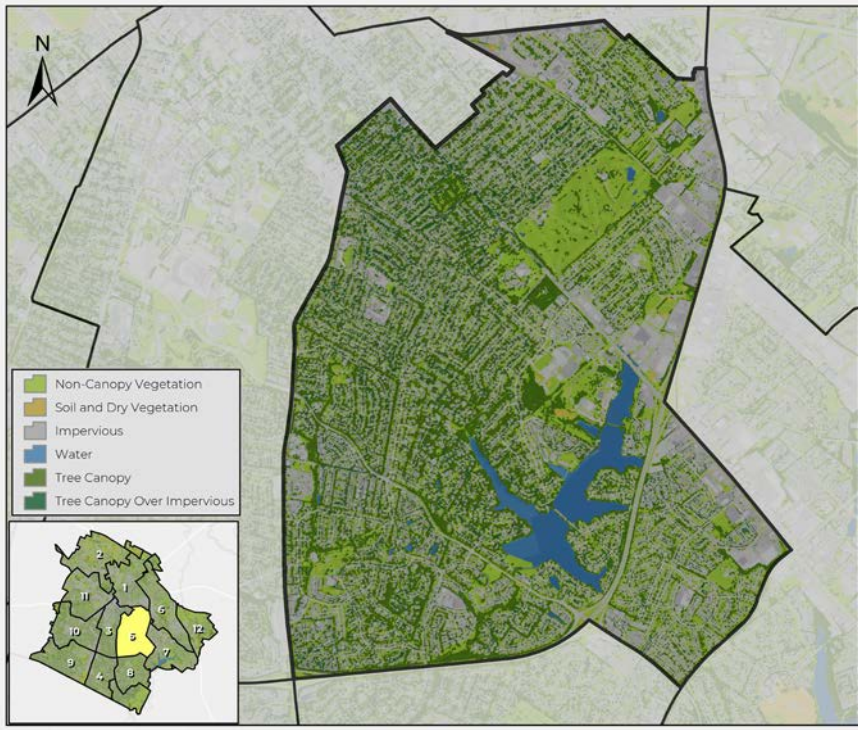
**OVERALL GRADE:**

**C-**

City Council District 4 experienced a 7% increase (198 acres) in canopy between 2012 and 2020. Although this district has the smallest amount of land acres, it has ample plantable space that should be utilized to reach its canopy goal of 30% UTC.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 4 contained 28% UTC, which is approaching the goal of 30% district wide canopy cover.	<b>A</b>
<b>POTENTIAL CANOPY</b>	District 4 contained 21% PPA, which could bring its total canopy cover to 57% if all plantable space is utilized.	<b>C-</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 11 million gallons of water per year, providing over \$94K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 1,247 acres of impervious land cover and only 790 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 4 trees provide over \$7.3 million in annual benefits, or \$2.6k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 5



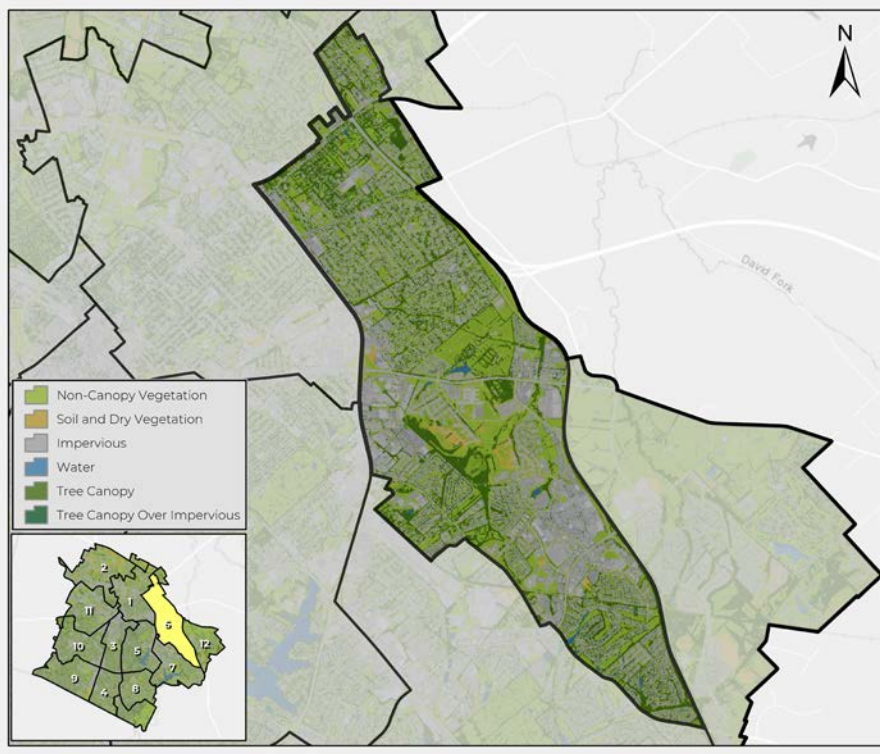
**OVERALL GRADE:**

**C**

District 5 had the highest percentage of urban tree canopy with 1,290 acres, or 30% of the district's area. City Council District 5's UTC accounted for 10% of Lexington's total tree canopy.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 5 is the only district that has achieved its UTC goal of 30%.	<b>A+</b>
<b>POTENTIAL CANOPY</b>	District 5 contained 25% PPA, which could bring its total canopy cover to 55% if all plantable space is utilized.	<b>C+</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 17 million gallons of water per year, providing over \$154K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 2,013 acres of impervious land cover and only 1,290 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 5 trees provide over \$12 million in annual benefits, or \$2.6k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 6



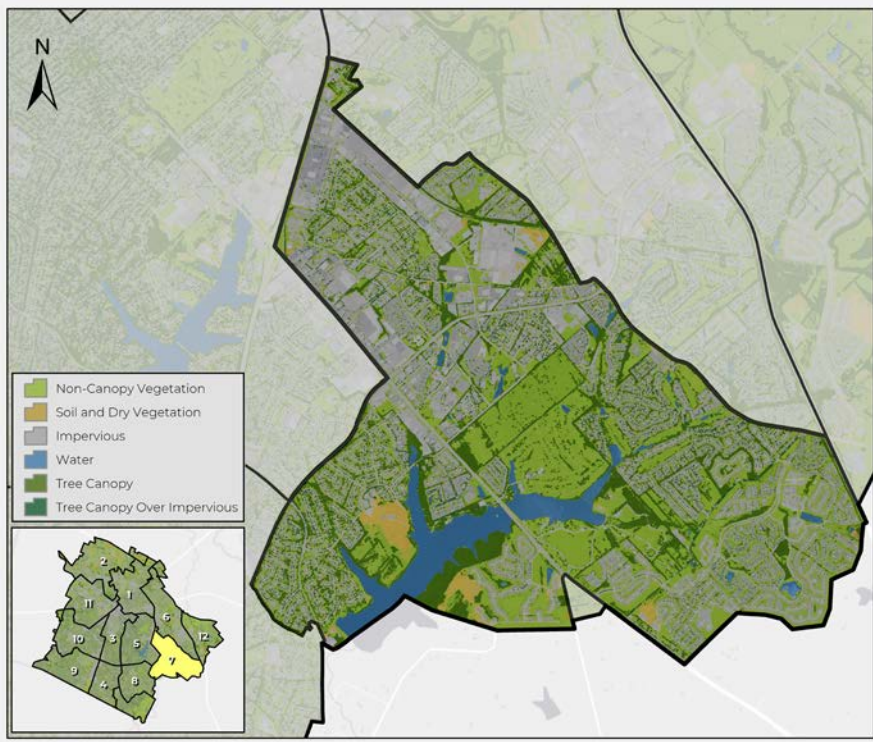
**OVERALL GRADE:**

**D**

City Council District 6 had a below-average canopy cover at 20% UTC. However, this district gained 46 acres of urban canopy since 2012. This district can continue its upward trajectory of canopy gain if it utilizes its 1,778 acres of plantable space.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 6 contained 20% UTC, and has not yet achieved its goal of 30% canopy cover.	<b>D+</b>
<b>POTENTIAL CANOPY</b>	District 6 contained 34% PPA, which could bring its total canopy cover to 54% if all plantable space is utilized.	<b>D</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 14 million gallons of water per year, providing over \$122K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 2,380 acres of impervious land cover and only 1,019 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 6 trees provide over \$9.5 million in annual benefits, or \$1.8k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 7



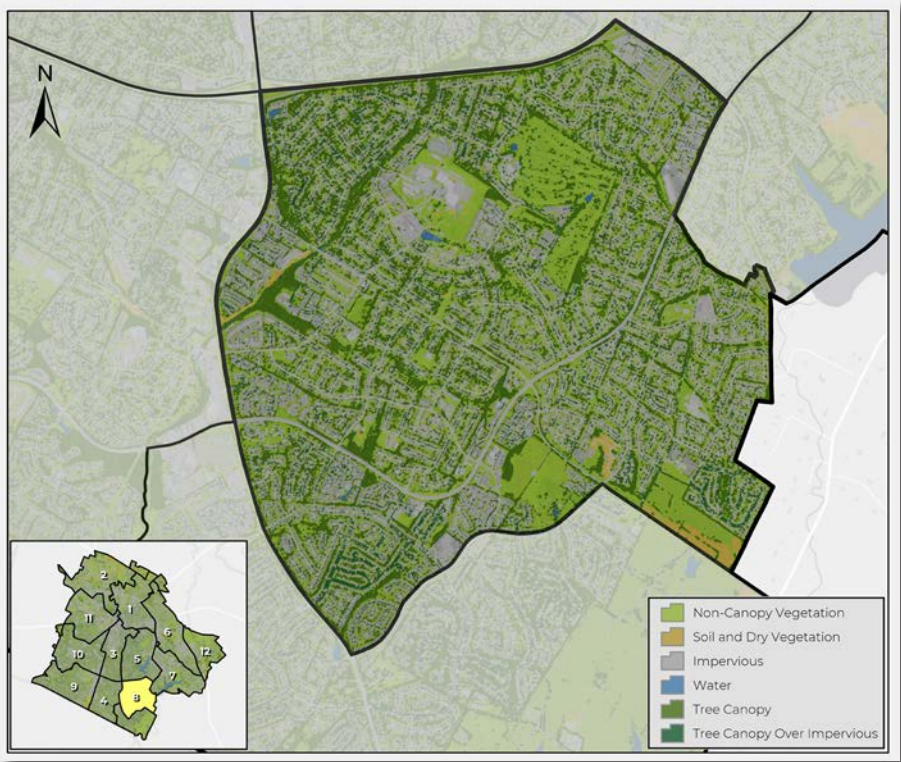
**OVERALL GRADE:**

**D**

City Council District 7 had the smallest amount of UTC acres of all the districts. However, this district has the potential to almost double its canopy if it utilizes all of the 1,421 acres of plantable space.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 7 contained 19% UTC, and has not yet achieved its goal of 30% canopy cover.	<b>D</b>
<b>POTENTIAL CANOPY</b>	District 7 contained 34% PPA, which could bring its total canopy cover to 53% if all plantable space is utilized.	<b>D</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 11 million gallons of water per year, providing over \$96K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 1,819 acres of impervious land cover and only 801 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 7 trees provide over \$7.4 million in annual benefits, or \$1.6k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 8



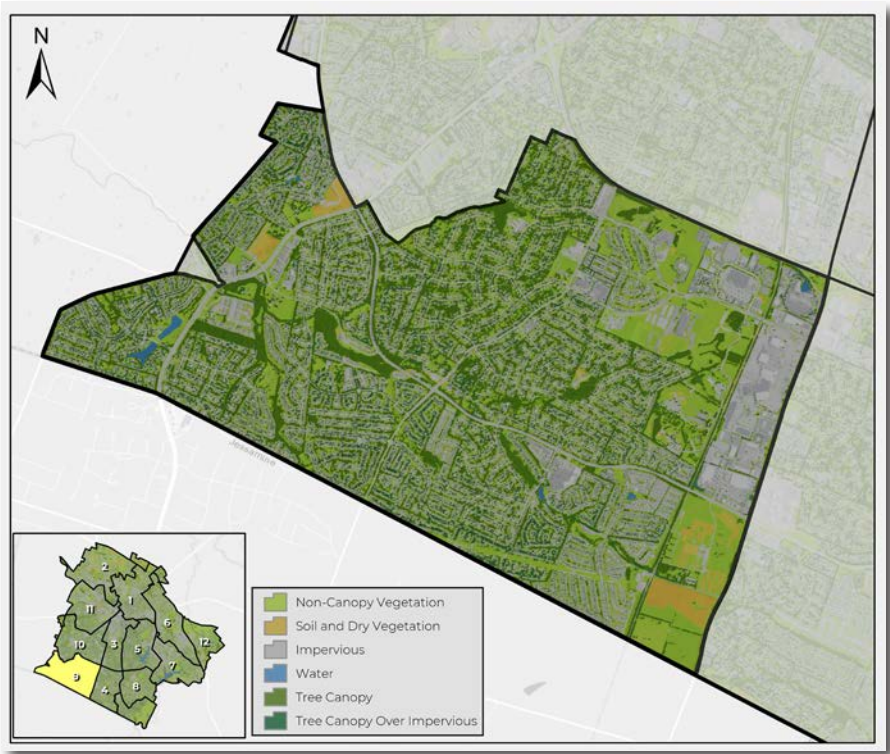
**OVERALL GRADE:**

**C-**

City Council District 8 had more potential canopy than current canopy. This district should take advantage of the 966 plantable acres to reach its goal of 30% UTC cover.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 8 contained 27% UTC, which is approaching the goal of 30% district wide canopy cover.	<b>A-</b>
<b>POTENTIAL CANOPY</b>	District 8 contained 32% PPA, which could bring its total canopy cover to 59% if all plantable space is utilized.	<b>C-</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 11 million gallons of water per year, providing over \$99K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 1,273 acres of impervious land cover and only 825 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 8 trees provide over \$7.6 million in annual benefits, or \$2.5k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 9



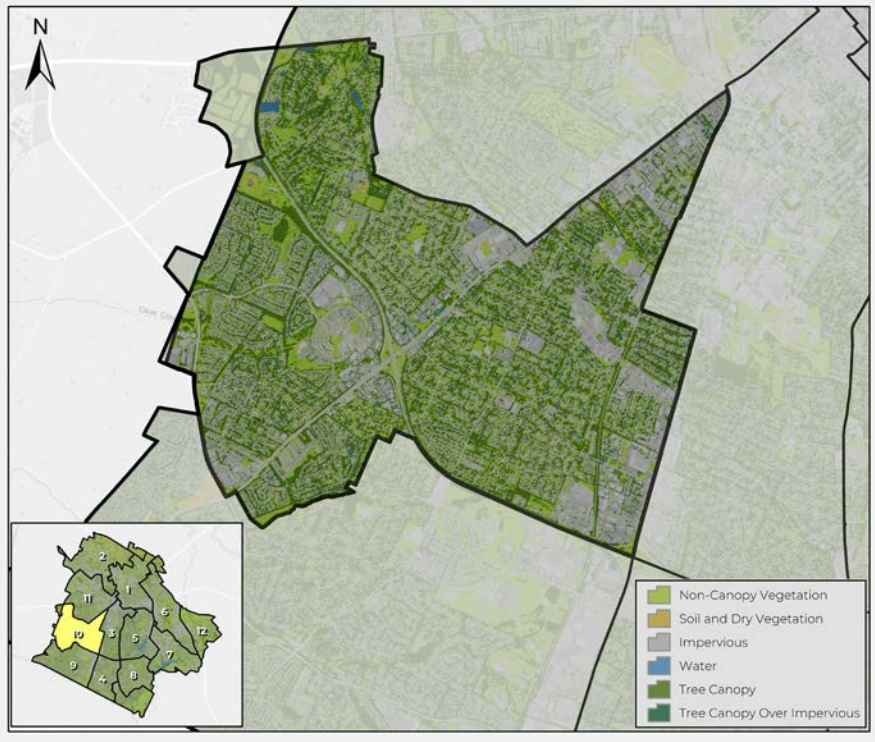
**OVERALL GRADE:**

**C-**

City Council District 9 gained 303 acres of UTC from 2012 to 2020 bringing its canopy cover up to 27%. If the district continues to utilize the remaining 1,517 acres of available plantable space, additional ecosystem benefits will be realized.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 9 contained 27% UTC, which is approaching the goal of 30% district wide canopy cover.	<b>A-</b>
<b>POTENTIAL CANOPY</b>	District 9 contained 32% PPA, which could bring its total canopy cover to 59% if all plantable space is utilized.	<b>C-</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 17 million gallons of water per year, providing over \$153K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 1,969 acres of impervious land cover and only 1,277 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 9 trees provide over \$11.9 million in annual benefits, or \$2.5k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 10



**OVERALL GRADE:**

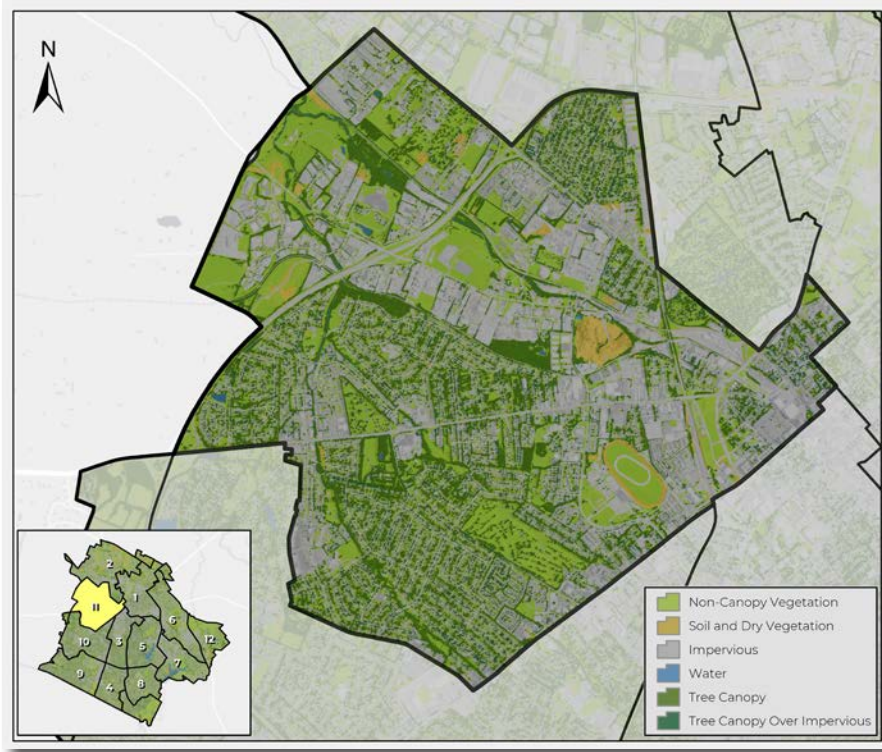
**C**

City Council District 10 experienced the greatest tree canopy gain (336 acres or 7%) between 2012 and 2020. If this district utilizes its 1,219 acres of plantable space, it will soon reach its canopy goal of 30% UTC.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 10 contained 28% UTC, which is approaching the goal of 30% district wide canopy cover.	<b>A</b>
<b>POTENTIAL CANOPY</b>	District 10 contained 26% PPA, which could bring its total canopy cover to 54% if all plantable space is utilized.	<b>C</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 18 million gallons of water per year, providing over \$158K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 2,278 acres of impervious land cover and only 1,317 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 10 trees provide over \$12.2 million in annual benefits, or \$2.6k per acre.	<b>A+</b>



# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 11



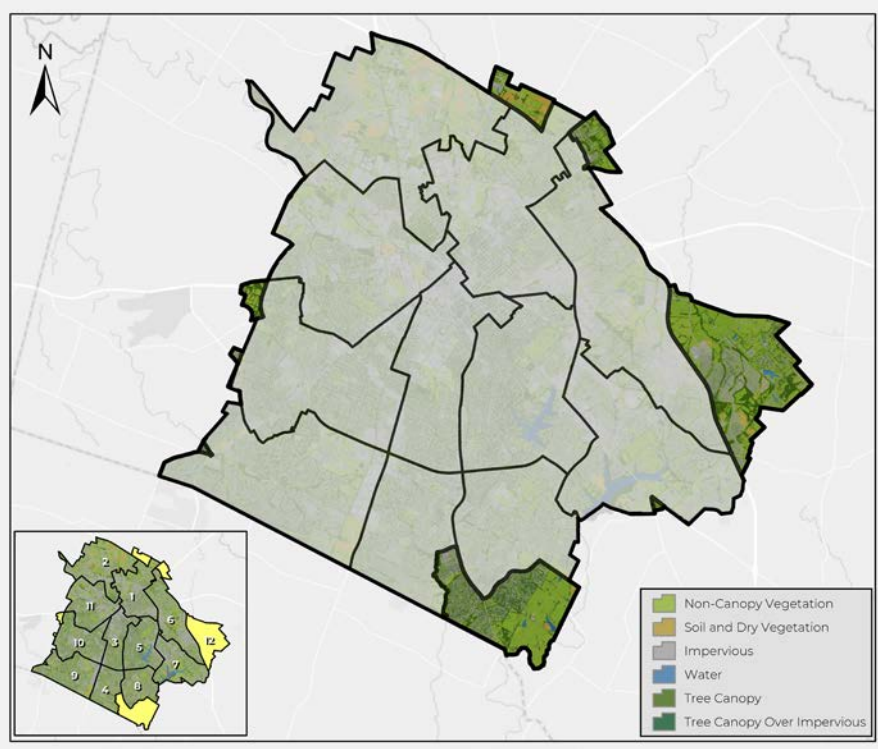
**OVERALL GRADE:**

**C-**

City Council District 11 had one of the largest percentages of unsuitable areas for planting. Tree benefits would be greatly valued in this area because so many of the USA's residents live and recreate in this district.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 11 contained 23% UTC, and has not yet achieved its goal of 30% canopy cover.	<b>C+</b>
<b>POTENTIAL CANOPY</b>	District 11 contained 28% PPA, which could bring its total canopy cover to 50% if all plantable space is utilized.	<b>C-</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 15 million gallons of water per year, providing over \$134K in annual stormwater benefits.	<b>F</b>
<b>HEAT MITIGATION</b>	This district had 2,410 acres of impervious land cover and only 1,118 acres of tree canopy.	<b>F</b>
<b>CANOPY VALUE</b>	District 11 trees provide over \$10 million in annual benefits, or \$2.1k per acre.	<b>A+</b>

# CANOPY IN LEXINGTON'S COUNCIL DISTRICT 12



**OVERALL GRADE:**

**C**

City Council District 12 contributed the highest percentage of the citywide canopy, with 1,400 acres. District 12 also contained 52% PPA, the highest of any district, and contributes 18% of the total PPA for the urban service area. This district received the highest grade of all districts.

CRITERIA		GRADES
<b>CURRENT CANOPY</b>	District 12 contained 23% UTC and contributed the highest percentage of citywide canopy at 10% citywide canopy.	<b>C+</b>
<b>POTENTIAL CANOPY</b>	District 12 contained 52% PPA, which could bring its total canopy cover to 74% if all plantable space is utilized.	<b>D-</b>
<b>STORMWATER CONTROL</b>	Trees in this district absorb 19 million gallons of water per year, providing over \$168K in annual stormwater benefits.	<b>C</b>
<b>HEAT MITIGATION</b>	This district had 1,390 acres of impervious land cover and 1,400 acres of tree canopy.	<b>C-</b>
<b>CANOPY VALUE</b>	District 12 trees provide over \$13 million in annual benefits, or \$2k per acre.	<b>A+</b>

AUGUST | 2022

URBAN TREE CANOPY  
**REPORT CARDS**

LEXINGTON-FAYETTE COUNTY,  
KENTUCKY

