



Montgomery County Tree Canopy Law FY24 Annual Report

This report is prepared pursuant to Section 55-9 of the Montgomery County Code which requires the Department of Permitting Services (DPS) and Department of Environmental Protection (DEP) to jointly submit an annual report on the “County shade tree planting program” established as required by the Montgomery County Tree Canopy Law. This Fiscal Year (FY) 2024 report reflects activities and data from the effective date of the law on March 1, 2014, through the end of FY24, or June 30, 2024.

Background

The Tree Canopy Law applies to development activity subject to a sediment control permit from Montgomery County, Maryland. In general, activities regulated by the [Tree Canopy Law](#) are required to provide mitigation in the form of planting shade trees on the site where the disturbance occurs. Applicants may choose not to plant the required shade trees for any reason and instead pay fees. On April 30, 2024, [Bill 40-23](#) took effect increasing this fee from \$250 per tree to \$470 per tree. Fees are paid into the Tree Canopy Conservation Account, a dedicated fund that can only be used to plant and establish shade trees. DPS is responsible for issuing sediment control permits and administering the Tree Canopy Law, and DEP is responsible for implementing tree planting utilizing the funds in the Tree Canopy Conservation Account, as well as outreach programs and staffing utilizing other funds. Exemptions from the Tree Canopy Law include development activities required to mitigate under the Forest Conservation Law. The Cities of Rockville and Gaithersburg issue their own sediment control permits and, therefore are not subject to such County permits or the Tree Canopy Law.

Tree Montgomery Program

[Tree Montgomery](#) is a program to plant shade trees and raise awareness of environmental concerns. The program emphasizes the [wide array of benefits of shade trees](#) by installing them, at no cost to the property owner on private property, HOA lands, multifamily properties, congregations, businesses, public and private schools, and County facilities. This program meets the requirements of Section 55-10 of the County Code to utilize the funds in the dedicated Tree Canopy Conservation Account.

Analysis and Outcomes

The number of trees installed by Tree Montgomery has increased annually. In FY24, the program installed 4,240 trees with 3,069 of these installed to meet requirements of the Tree Canopy Law. In FY23, 3,371 trees were installed. Through the end of FY24, \$6,754,644 had been deposited into the Tree Canopy Conservation Account. Total expenditures for shade trees installed by Tree Montgomery were \$6,074,944 and the FY24 year-end account balance was \$679,700. The cost per shade tree includes the tree, installation, deer protection, and stakes when needed. A 2-year aftercare package is purchased for about one-third of the trees. The average cost per shade tree paid for from the Tree Canopy Conservation Account in FY24 was \$459 and for all years combined it was \$450. The new mitigation fee per tree had a nominal impact during FY24 because only a few sediment control permits were approved after the effective date. In early FY24, a new competitively bid planting contract was executed, and the average cost to install a shade tree increased.

Cumulative Summary

Through the end of FY24, Tree Montgomery program has planted 15,027 shade trees, including 4,240 trees planted in FY24 alone. Evaluation of these plantings during the last ten years indicate the following facts.

- Through the end of FY24, \$6,754,644 has been paid into the Tree Canopy Account, and \$6,074,944 has been spent on planting and establishing shade trees, leaving an account balance of \$679,700 (Figure 1).
- 29% of the trees have been planted in Silver Spring and 10.7% in Bethesda and Chevy Chase (Figure 4).
- Tree survival remains notably high at 93.4% based on triennial inspections of all trees installed since 2015.
- 48 different tree species have been planted, and 93% have been native to the mid-Atlantic or southeastern United States with 84% of those installed native to Montgomery County.
- The most commonly planted species was red maple at 17%. The most commonly planted family was *Fagaceae* at 35% including both red and white oaks (Figure 5).
- Shade tree plantings through Tree Montgomery provided more than 128 acres of equivalent impervious area credits toward the County's Municipal Separate Storm Sewer System (MS4) permit requirements.
- 77% of trees were installed on residential properties, 18% were installed on public property (Figure 6).
- An average of 3.1 trees were installed at each single-family property participating in the program in FY24.
- Since 2015, a total of 8,519 applications have been received, including 1,293 in FY24 alone (Figure 7).
- At the end of FY24, 2,948 separate properties received at least one shade tree through Tree Montgomery (Figure 7) with each property receiving several interactions with tree experts including on-property visits, phone calls, and numerous emails throughout the process of receiving their trees.
- 50% of all applications processed result in at least one shade tree planting.
- Equity target areas have received a slightly greater percentage of tree plantings per county area (Figure 8).

Analysis of sediment control (SC) permits from FY14 through FY24 (Figure 2) indicate that SC permits where the amount of disturbance was less than 12,000 sq ft, generally redevelopment on small lots, accounted for:

- 63% of all SC permit applications,
- 50% of all mitigation required, and
- 54% of all mitigation fees paid (Figure 3).

During Tree Montgomery's ten years of planting shade trees, many updates and enhancements have improved the program. Some of the highlights are listed below.

- Procedures are continuously refined to increase efficiency and increase awareness of the benefits of trees.
- Based on increased demand for canopy trees by residents, HOA's, and schools, a third program manager was hired in FY24 to assist with this demand and target plantings in underserved areas. A new position to assist with inspections was approved in the FY24 budget and is expected to be filled in Spring FY25.
- Outreach and education continue to be conducted on a one-to-one basis as applicants are given the time and assistance needed to make thoughtful decisions about tree placement and species.
- Efforts continue to foster a close working relationship with the tree planting and inspecting contractors to ensure high quality trees, installations, and interactions with applicants receiving trees.
- Most applications are processed within 6 to 12 months of receipt. Given the seasonal nature of planting and sites visits, this is the targeted timeframe.
- Demographic questions are being developed for the Tree Montgomery application to refine DEP's understanding of who the Tree Montgomery program is reaching and how to better serve all residents of Montgomery County.
- Funding from grants and the Water Quality Protection Fund was received in FY23 and FY24. These funds will supplement shade tree plantings through the Tree Montgomery program in FY25 and FY26.

Figure 1. Sediment Control Permits Subject to the Tree Canopy Law, Funds Spent, and Trees Planted

	FY14-FY19 Total	FY14-FY19 Average	FY20	FY21	FY22	FY23	FY24	Total
Approved Permits	2,371	474	261	282	376	325	233	3,848
Approved Permits Subject to Mitigation	1,394	279	194	192	257	213	160	2,410
Trees, Total Required as Mitigation	17,003	3,401	2,399	2,131	3,155	2,479	2,201	29,368
Trees, Planted as Mitigation	2,147	429	408	259	482	340	477	4,113
Trees, Difference in Required and Planted	-12,239	-2,449	-823	131	-1,045	933	1,345	-11,698
Trees for which Fees were Paid as Mitigation	14,856	2,971	1,991	1,872	2,673	2,139	1,724	25,255
Value of Fees Paid as Mitigation	\$3,714,000	\$742,800	\$497,750	\$468,000	\$668,250	\$534,750	\$440,460	\$6,323,210
Fees Deposited as Mitigation	\$3,566,274	\$713,255	\$496,000	\$594,000	\$807,250	\$654,250	\$636,870	\$6,754,644
Funds Spent by Tree Montgomery	\$1,255,339	\$251,068	\$454,803	\$776,548	\$717,397	\$1,463,582	\$1,407,275	\$6,074,944
Tree Canopy Fund Year End Balance	-	-	\$2,352,132	\$2,169,584	\$2,259,437	\$1,450,105	\$679,700	-
Trees Planted by <i>Tree Montgomery</i>	2,617	523	1,168	2,003	1,628	3,072	3,069	13,557
Trees Planted thru Grants and WQPF	n/a	n/a	n/a	n/a	n/a	299	1,171	1,470
Average Cost per Tree by <i>Tree Montgomery</i> ¹	\$480	\$480	\$389	\$388	\$441	\$476	\$459	\$450

¹The average cost per tree is impacted by the percentage of trees receiving aftercare. Initially aftercare was purchased for most trees. This was gradually reduced and since FY19, relatively few trees on private property received aftercare. In FY24, most plantings on public property, including MCPS, and their aftercare were funded through grants. Few other trees received aftercare.

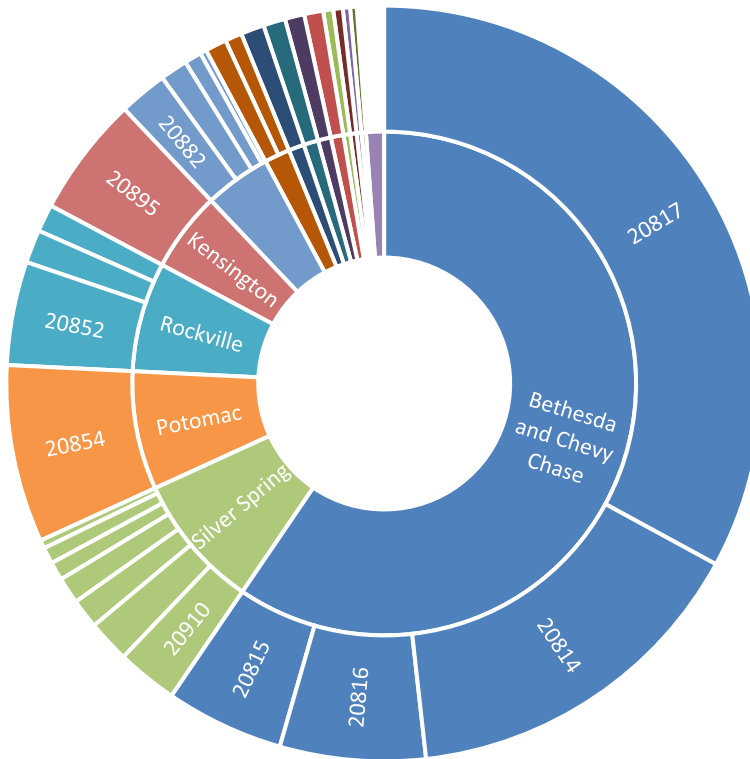
Figure 2. Trees Planted by Applicants and Fee Payments by Area of Disturbance FY14– FY24

Limit of Disturbance (sq. ft.)*	Permits Subject to Mitigation	Mitigation Required (Total Trees)	Applicants Who Planted Trees	Number of Trees Planted by Applicants**	Applicants Paying Fees	Trees for Which Fees Were Paid	Fee Payments
0-6,000	317	5,247	40	807	305	4,440	\$1,119,460
6,001-8,000	443	2,705	18	57	441	2,648	\$662,000
8,001-12,000	754	6,764	36	137	751	6,627	\$1,656,750
12,001-14,000	177	2,109	16	121	173	1,988	\$497,000
14,001-40,000	565	8,444	117	1,327	504	7,117	\$1,779,250
>40,000	154	4,099	79	1,664	102	2,435	\$608,750
Total	2,410	29,368	306	4,113	2,276	25,255	\$6,323,210

*Limit of disturbance data is from approved Sediment Control Permits. Categories of area of limit of disturbance correspond with those outlined in the Tree Canopy Law.

**The number of applicants planting trees plus the number of applicants paying fees may exceed the number of applicants subject to the law because some applicants satisfy their mitigation requirement through a combination of planting and paying the fee.

Figure 3. Fees Paid by Zip Code, FY14 – FY24



Redevelopment of small lots down county was a significant portion of the sediment control permits requiring mitigation. Total applications for sediment control permits with small disturbances, or those less than 12,000 sq ft of disturbance, accounted for 63% of all permit applications and 54% of all mitigation required.

Figure 4. All Trees Planted by Tree Montgomery by Zip Code, FY15 – FY24



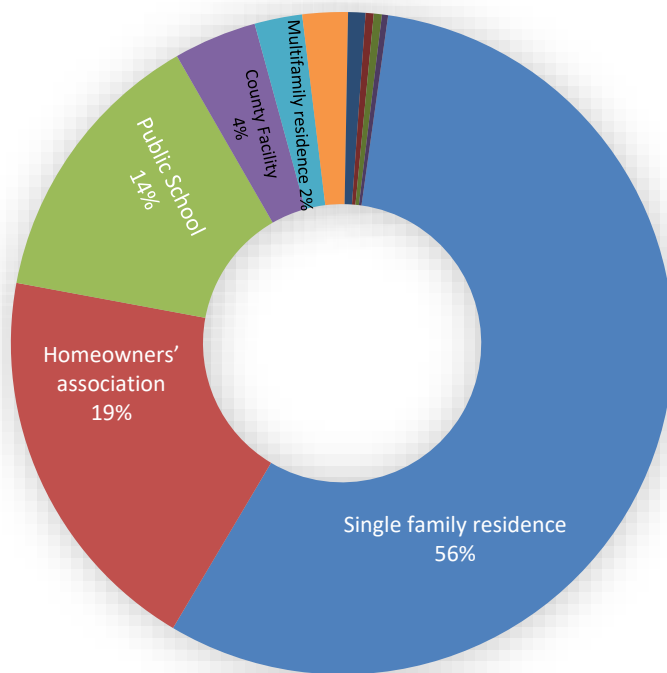
The Tree Canopy Law requires prioritizing planting efforts in areas where development occurs that is subject to the Law, and where canopy is lacking. Tree Montgomery has prioritized applications from the two zip codes, Bethesda (20814) and Chevy Chase (20817), with the most development activity. Potomac (20854) is the zip code with the third highest development is occurring.

Figure 5. Tree Species by Family Planted by Tree Montgomery in FY15 – FY24



To maintain a diverse population of tree species, widely accepted industry guidelines suggest that no more than 30% of new plantings should be in the same taxonomic family, no more than 20% in the same genus, and no more than 10% in any one species. The most commonly planted family was *Fagaceae* (oaks and beech) at 35%, the genus was *Quercus* (oaks) at 34%, and the species was red maple at 17%. Additionally, only 7% of the trees planting were not native to the mid-Atlantic or southeastern United States.

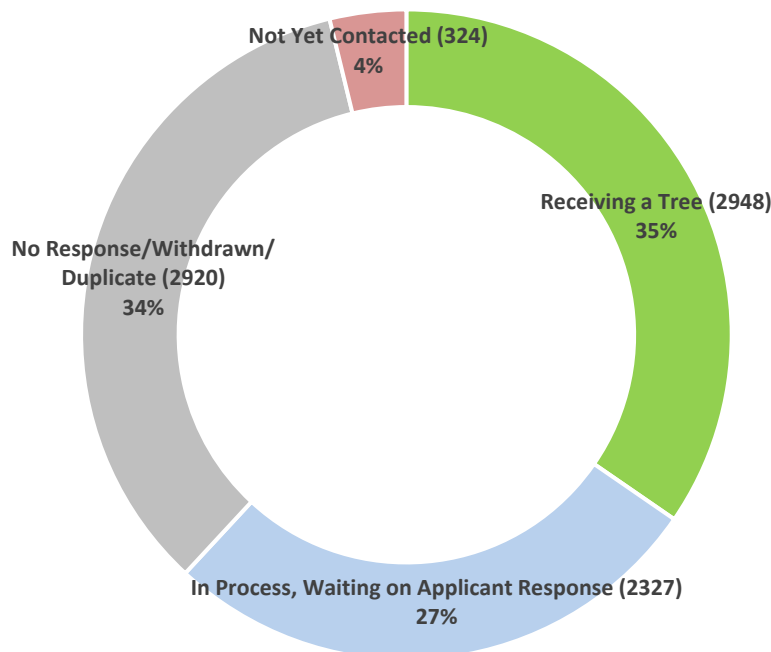
Figure 6. Trees Planted by Tree Montgomery by Property Type, FY15 – FY24



Tree Montgomery's goals include establishing canopy on private property and 77% of all shade trees planted were installed on residential land including single family residences, homeowner's associations, and multi-family communities. Additionally, shade trees were installed at public schools, county-owned facilities, congregations, non-profit lands, and private schools.

The new shade trees will provide benefits to many residents in Montgomery County.

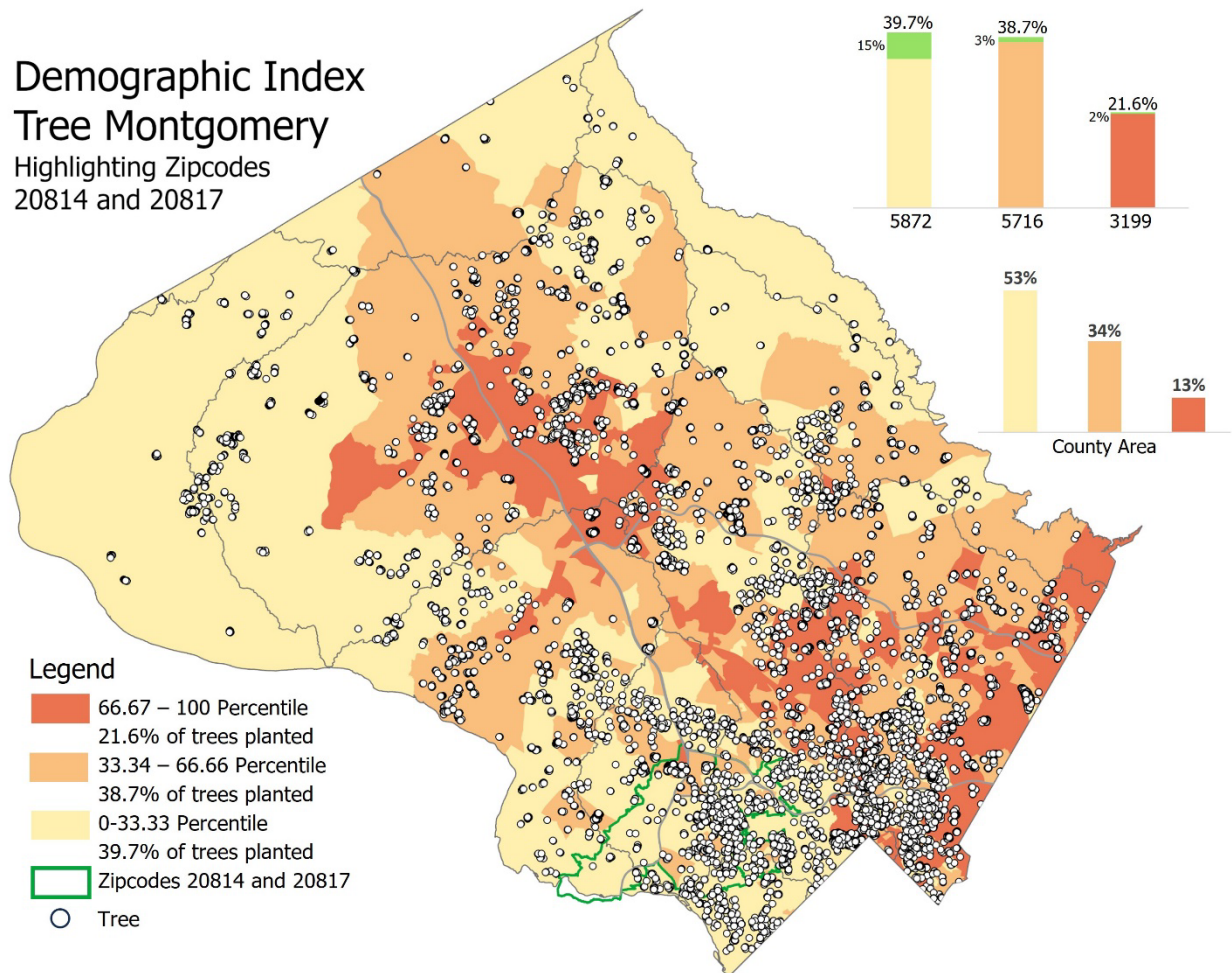
Figure 7. Total Applications Received and Status, as of June 30, 2024



A total of 8,519 were received through the end of FY24. Of these, 2,948 unique properties have received at least 1 shade tree, including 722 unique properties in FY24.

The applications with the status of "Not Yet Contacted" were received between April 1st and June 30th, 2024. They will be contacted in the next year. Applications "In Process" did not complete the process for trees to be planted during FY24 and may receive trees in future years.

Figure 8. Demographic Index Showing all Trees Planted, FY15 – FY24



The [Equity Assessment Map](#), shown above, is used by DEP to help ensure equity is factored into restoration efforts. It groups the County into three brackets based on an equity index that considers people of color and income. According to this graphic, red-shaded regions make up 13% of the County and are highest on the equity index, meaning these are the most under-resourced regions (66.67-100 Percentile). Orange-shaded regions make up 34% of the County and are mid-level on the equity index (33.34-66.66 Percentile). Yellow-shaded regions make up 53% of the County area and are lowest on the equity index (0-33.33 Percentile). The distribution of shade tree plantings was such that 21.6% of trees were planted in the red-shaded regions, the demographical bracket that comprises 13% of the County and are the most under-resourced areas. The mid-level index bracket, or orange-shaded areas that make up 34% of the County, received 38.7% of the trees. The lowest-level index areas, yellow-shaded regions that make up 53% of the County, received 39.7% of the trees. This demonstrates that 60.3% of the trees were planted in regions of the County that are the high- and mid-equity index levels.

The Tree Canopy Law requires that priority be given to planting shade trees in areas where disturbance is occurring due to development. The highest rates of development subject to the Tree Canopy Law occurs in two zip codes, 20814 and 20817. These two zip codes are outlined in green on the map. The map shows that a high proportion of shade trees are planted in urban areas of the County.