



Montgomery County Tree Canopy Law FY22 Annual Report

This report is prepared pursuant to Section 55-9 of the Montgomery County Code which requires the Departments of Permitting Services (DPS) and 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 FY22 report reflects activities and data from the effective date of the law on March 1, 2014 through June 30, 2022.

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 into the Tree Canopy Conservation Account. The fee is \$250 per tree, equal to rate for bonding trees in the right-of-way. The account is a dedicated fund that can only be used to plant and establish shade trees. DPS is responsible for implementing 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 general funds. Exemptions from the Tree Canopy Law include activities required to mitigate under the Forest Conservation Law. The Cities of Rockville and Gaithersburg issue their own sediment control permits therefore are not subject to such County permits or the Tree Canopy Law. Only five other fourteen jurisdictions have adopted the 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, for free, 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

Implementation of both the Tree Canopy Law and Tree Montgomery program continues as anticipated. Through the end of FY22, \$5,463,524 has been deposited cumulatively into the Tree Canopy Conservation Account, the total appropriation through the budget process was \$3,650,000, and the expenditures for shade trees installed by Tree Montgomery were \$3,204,088. The cost per shade tree includes the tree, installation, deer protection, and a 2-year aftercare package for about one-third of the trees. The average cost per shade tree for all years combined was \$436, while the fee paid for a mitigated tree remains at \$250. The program remains popular, and tremendous growth is anticipated for the next several years.

Summary

Through the end of FY22, Tree Montgomery has planted 7,372 shade trees. Evaluation of these plantings during the last eight years indicate the following facts.

- \$5,463,524 was paid into the Tree Canopy Account and \$3,204,088 of the Tree Canopy Account was spent on planting and establishing shade trees (Figure 1).
- 15.5% of trees planted are in Bethesda and Chevy Chase and 25.1% are in Silver Spring (Figure 4).
- Tree mortality remains low at 5.7% based on triennial inspections of all trees installed since 2015.
- 48 different tree species were planted, 96% were native to the mid-Atlantic or southeastern United States and 86% of those installed were native to Montgomery County.
- The most commonly planted species was red maple at 11%, the most commonly planted family was *Fagaceae* at 24% including both red and white oaks; widely accepted guidelines for taxonomic diversity of shade tree species were followed (Figure 5).
- Shade tree plantings through Tree Montgomery provided more than 56.53 acres of equivalent area credits toward the County's Municipal Separate Storm Sewer System (MS4) permit requirements.
- Two to four shade trees were typically installed at each single-family property.
- 54% of all applications received and processed result in at least one shade tree planting.
- By December 31, 2022, more than 6,383 applications had been received including 928 in FY22.
- As of December 31, 2022, 2,302 separate properties received at least one shade tree through the 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.
- Equity target areas received a slightly greater percentage of tree plantings per county area (Figure 8).

Analysis of sediment control permits from FY14-FY22 indicate:

- Sediment control permits with limits of disturbance of up to 12,000 sq ft accounted for:
 - 63% of all SC permit applications.
 - 55% of all mitigation fees paid.
 - 51% of all mitigation required.
- 12% of all SC permits proposed to install at least one tree.
- At the time of application, applicants of SC permits proposed to install 13% of all mitigation trees required.

The first eight years of planting shade trees has allowed for many updates and improvements to the Tree Montgomery program. Some of the highlights include the following.

- As procedures by the DEP team, as well as the planting and inspecting contractors, continue to be refined for efficiency, and with the addition of a second program manager, the capacity of the Tree Montgomery program has expanded to installing double the number of trees compared to last year.
- Outreach and education are 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.
- The backlog of applications was resolved. All applications are processed within 6 to 12 months of receipt. Given the seasonal nature of planting and sites visits, this is the targeted timeframe.
- Two grants were received for FY23 plantings through Tree Montgomery to supplement the efforts to increase canopy. Two additional grant applications were submitted to supplement FY24's efforts.
- The overall Tree Montgomery program will expand beyond the minimum requirements of the Tree Canopy Law in FY23.

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

	FY14*	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Total
Approved Permits	178	501	525	479	351	337	261	282	376	3,290
Approved Permits Subject to Mitigation	13	211	292	366	262	250	194	192	257	2,037
Trees, Total Required as Mitigation	106	2,291	3,383	4,162	3,598	3,463	2,399	2,131	3,155	24,688
Trees, Planted as Mitigation	44	196	487	520	433	467	408	259	482	3,296
Trees for which Fees were Paid as Mitigation	62	2,095	2,896	3,642	3,165	2,996	1,991	1,872	2,673	21,392
Value of Fees Paid as Mitigation	\$15,500	\$523,750	\$724,000	\$910,500	\$791,250	\$749,000	\$497,750	\$468,000	\$668,250	\$5,348,000
Fees Deposited as Mitigation	\$11,000	\$509,250	\$676,525	\$703,249	\$819,250	\$847,000	\$496,000	\$594,000	\$807,250	\$5,463,524
Funds Spent by Tree Montgomery	-	\$27,096	\$253,219	\$379,655	\$351,672	\$243,697	\$454,803	\$776,548**	\$717,397	\$3,214,960
Trees Planted by Tree Montgomery	-	47	456	746	814	554	1,198	2,003	1,554	7,372

*FY14 data includes only after March 1, 2014, the effective date of the law.

**Corrected from prior year.

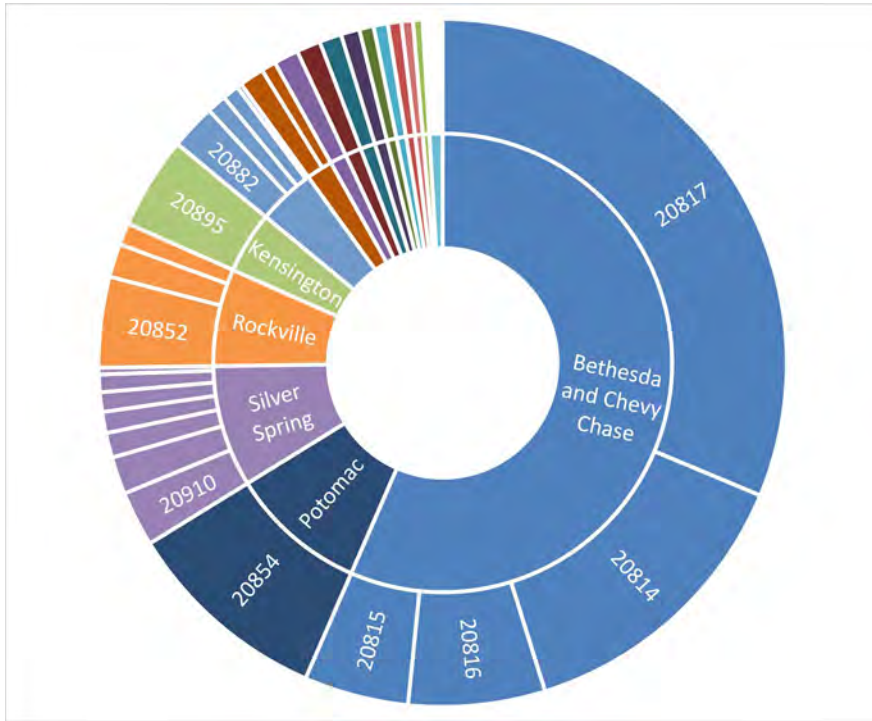
Figure 2. Trees Planted by Applicants and Fee Payments by Area of Disturbance FY14– FY22

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	257	4,311	33	618	250	3,693	\$923,250
6,001-8,000	375	2,288	17	55	373	2,233	\$558,250
8,001-12,000	654	5,873	32	116	652	5,757	\$1,439,250
12,001-14,000	148	1,758	12	88	145	1,670	\$417,500
14,001-40,000	476	7,119	93	1,065	427	6,054	\$1,513,500
>40,000	127	3,339	67	1,354	84	1,985	\$496,250
Total	2,037	24,688	254	3,296	1,931	21,392	\$5,348,000

*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 – FY22



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 66% of all permit applications and 55% of all mitigation required.

Figure 4. Trees Planted by Tree Montgomery by Zip Code, FY15 – FY22



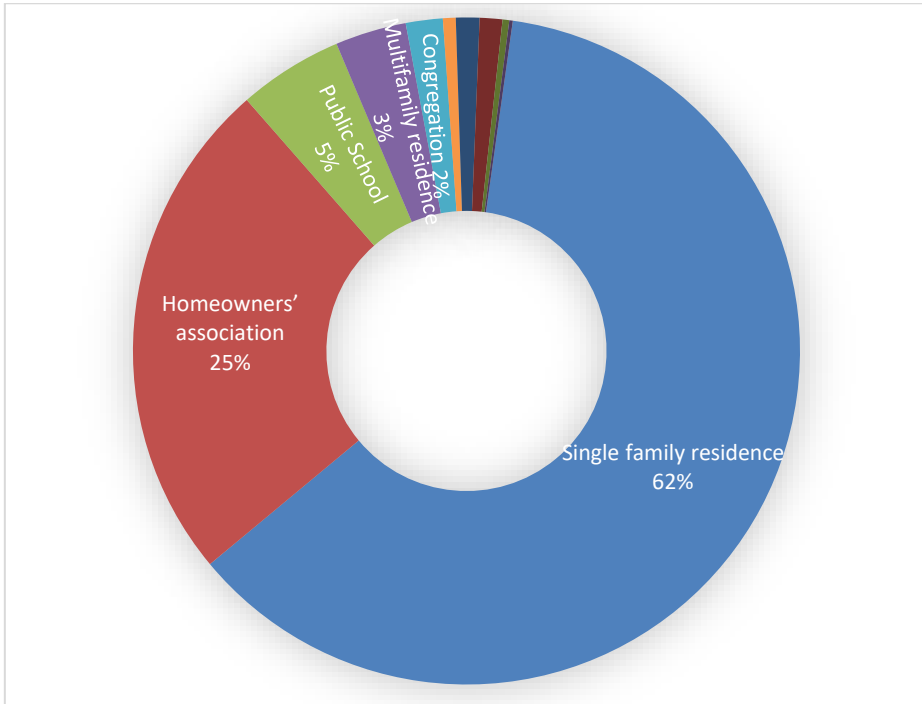
The Tree Canopy Law requires prioritizing planting efforts in areas where development occurs. Therefore, 10% of the trees planted by Tree Montgomery are in the two zip codes with the most development activity. They are 20814 and 20817.

Figure 5. Tree Species and Families Planted by Tree Montgomery in FY15 – FY22



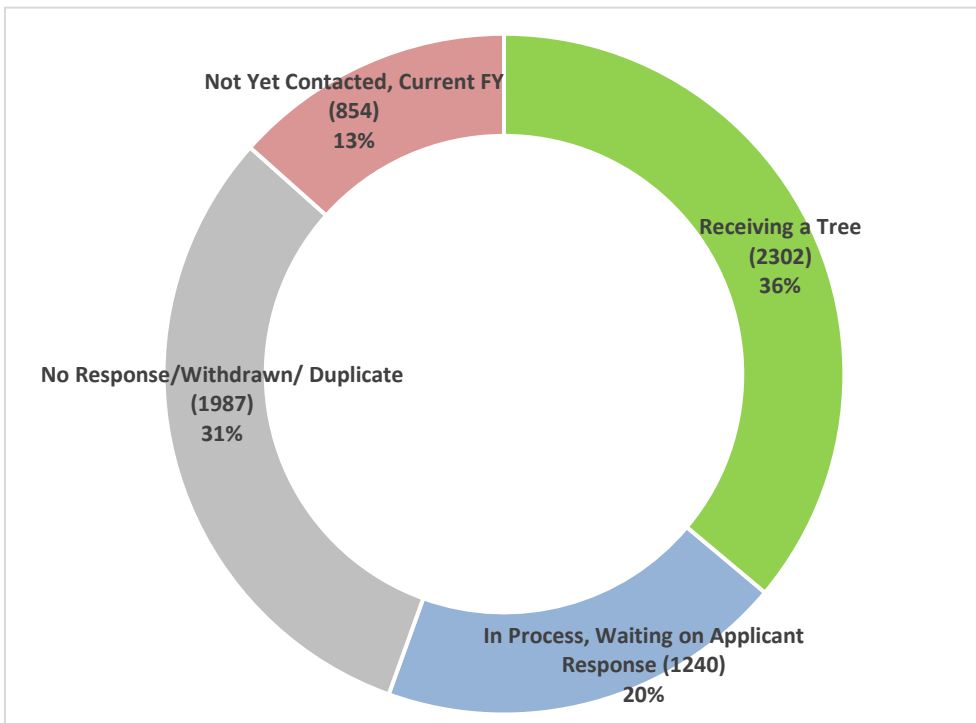
To maintain a diverse population of tree species, widely accepted industry guidelines suggest that no more than 30% of new plantings should be in the same taxonomic family, no more than 20% in the same genus, and no more than 10% in any one species. The most commonly planted family was *Fagaceae* (oaks and beech) at 24%, the genus was *Quercus* (oaks) at 24%, and the species was red maple at 11%. Additionally, only 4% 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 – FY22



Tree Montgomery’s goals include establishing canopy on private property. 93% of all shade trees planted were installed on residential land. Given the number of multifamily residences and HOA lands receiving trees, the plantings will provide benefits to many families in these communities.

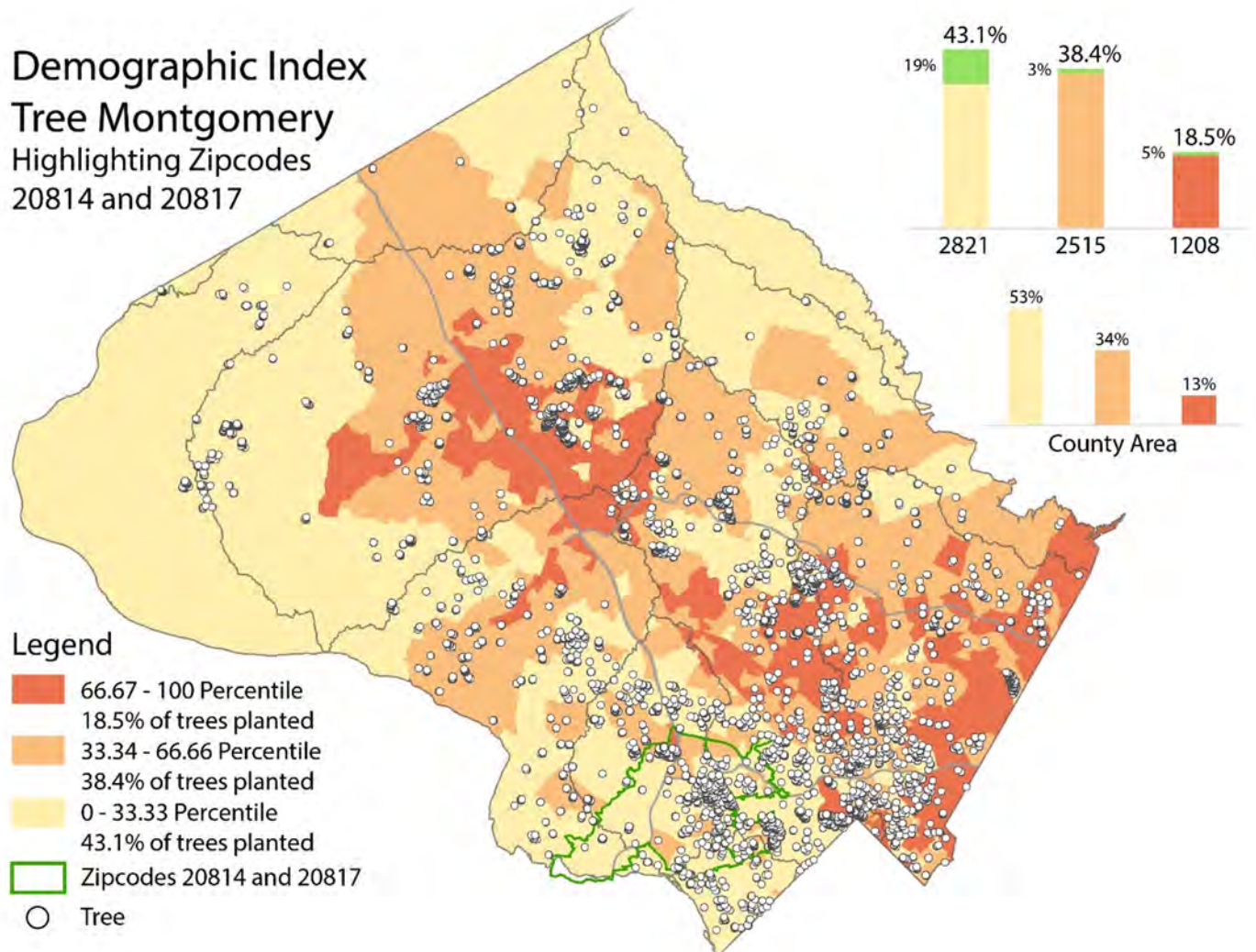
Figure 7. Total Applications Received, by Status, as of Dec 31, 2022



In the last year, the percentage of total applications not yet contacted decreased from 19% to 13% and the wait list was eliminated. Applicants are typically contacted within 6 to 9 months from the time they apply and are able to receive trees during the next planting season.

A total of 2,302 unique properties have received at least 1 shade tree, including 352 unique properties in FY22.

Figure 8. Demographic Index Showing all Trees Planted, FY15 – FY22



The shade tree plantings by Tree Montgomery closely align with the demographic index. Approximately 13% of the Montgomery County was in the 0—33 percentile and 18.5% of the trees planted were in these areas. Likewise, 34% of the County was in the second percentile with 38.4% of all trees planted were in these areas. Two zip codes, 20814 and 20817 (outlined in green), were prioritized for plantings due to requirements in the Tree Canopy Law. Figure 4 shows that 10% of all trees planted were in these two zip codes which is largely in the 66—100 percentile. The equity map and additional information index is available here: <https://mcgov-gis.maps.arcgis.com/apps/webappviewer/index.html?id=b91f22ed03e044bd9489e64d9bcc1471>.