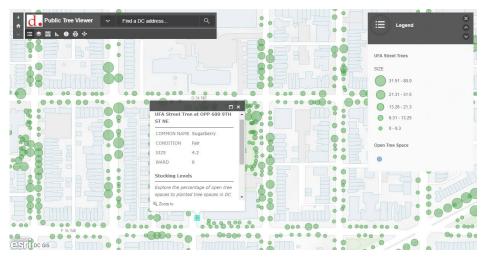
Urban Forestry in DC: Resource Equity and Data Transparency

The District Department of Transportation (DDOT) Urban Forestry Division (UFD) is the primary steward of Washington, DC's 170,000 public trees and has a mission to keep this resource healthy, safe, and growing. Each year, the UFD prunes, plants, and removes thousands of public trees. These decisions impact the lives of both residents and visitors, as trees are critical to the city's well-being. These trees improve the air and water quality; cool the neighborhoods; provide critical habitat for birds, bees, and urban wildlife; and more.

With a long history of caring for the extensive forest canopy in DC, the UFD has meticulously assembled datasets and applications to help in the division's forest management mission as well as to communicate with a variety of audiences. The UFD has also been a longtime proponent of Esri technology, using it not only to help people understand and connect with the forest that surrounds them but also to provide transparency into the process of allocating service resources equitably. This has been accomplished over the years through ArcGIS StoryMaps, ArcGIS Dashboards, configurable web applications, and custom mapping applications. However, what has been missing was a cohesive framework to bring all the components together under one digital roof.

To address this need, UFD has created an interactive community engagement site using ArcGIS Hub technology. UFD worked in collaboration with Esri Silver partner **SymGEO**, a Maryland-based GIS company specializing in ArcGIS Hub, ArcGIS Online, and state and local government solutions. The hub site is designed to let users explore information describing the history, value, and management of the urban forest in Washington, DC, and can be found at ddot-urbanforestry-dcgis.hub.arcgis.com/.

The UFD's hub site has been accessed more than 32,000 times over the last year and has been a popular destination for the public to learn about UFD services and resources. The urban forest story begins with a look to the past, introducing the audience to the long history and important role of trees in DC. The hub site also lets users explore the impressive variety of trees available for community enjoyment and leverages several applications and digital stories developed by the UFD. The flagship dataset, the



Public Tree Map, elegantly displays a tremendous amount of current information about the urban tree canopy. Links are provided to both the map and the underlying data for the community to use and explore.

The Services section of the hub site provides complete transparency into existing work requests, open work orders, and planned and recently completed services. The data is sourced from the UFD's internal work order management system and aggregated by geography, and summary statistics are presented using ArcGIS Hub and ArcGIS Dashboards technology. The Planting by Ward dashboard has been viewed thousands of times over the last year and provides a high-level overview of the equitable distribution of planting resources. Interactive web applications enable users to explore local work orders and were designed using ArcGIS Web AppBuilder. Often, tabulated results and the beneficial impact of these projects go unrecognized. UFD staff created several ArcGIS StoryMaps stories to convey the importance of the work being done equitably across all geographic wards. In addition, an ArcGIS Survey123 form can be found at the bottom of the hub site for two-way community engagement to continually improve service offerings.

As part of the UFD's hub site, several subinitiatives were developed for specific project purposes. One of these subinitiatives, Urban Wood Reuse: for Schools, discusses the benefits of urban wood reuse; where the wood comes from; and the variety of products available for schools including benches, stumps, and woodchips. It also provides a link to an order form as a convenient and easy way to request wood products.

Another section of the site, Forest Health, was designed to educate the community on how DDOT staff and DC residents help keep the urban canopy vibrant, healthy, and productive. The Forest Health pages discuss a range of preventive measures—including the Early Detection Rapid Response (EDRR) and the Cryptic Wood-Borer Insect (CWBI) programs—that the UFD takes to guard against pests, and tell how DC residents can identify and report invasive species.

For More Information

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↑ DDOT Urban Forestry Division feeds work order data in real time into ArcGIS Hub to inform residents faster.



↑ Service requests, open work orders, scheduled work, and completed work reports provide complete visibility into UFD's service cycle.

"We are excited to share our forest health programs with the public in this new format. The [hub site] is dynamic and easy to use. It allows users to learn about pests and pathogens to look out for, while also giving them the opportunity to report their observations."

—Kasey Yturralde, Forest Health and Community Outreach Specialist, DDOT Urban Forestry Division