

# Trees Planted in Community Statistical Areas in Baltimore City From 2013 to 2019

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```
library(sf)
```

```
## Warning: package 'sf' was built under R version 4.1.3
```

```
## Linking to GEOS 3.9.1, GDAL 3.2.1, PROJ 7.2.1; sf_use_s2() is TRUE
```

```
library(ggplot2)
library(patchwork)
```

```
trees_plant <- st_read("Number_of_Trees_of_Planted/Number_of_Trees_of_Planted.shp")
```

```
## Reading layer `Number_of_Trees_of_Planted' from data source
##   `C:\Users\sarah\OneDrive\Documents\GES486\Project1\Number_of_Trees_of_Planted\Number_of_Trees_of_Planted.shp'
##   using driver `ESRI Shapefile'
## Simple feature collection with 55 features and 11 fields
## Geometry type: MULTIPOLYGON
## Dimension:      XY
## Bounding box:   xmin: 1393927 ymin: 557733.6 xmax: 1445503 ymax: 621406.8
## Projected CRS: NAD83 / Maryland (ftUS)
```

```
for (i in 13:19) {
  nam <- paste0("twenty", i, sep = "")
  assign(nam, ggplot(data = trees_plant, aes_string(fill = paste("treeplt", i, sep = ""))) +
    geom_sf() +
    scale_fill_distiller(palette = "Greens", limits = c(min(0), max(400)), direction = 1) +
    labs(title = paste("Trees Planted in 20", i, sep = ""),
         caption = "Data Source: Open Baltimore",
         fill = "Number of Trees") +
    theme_void()
  )
}
```

```
twenty <- lapply (13:19, function(i) ggplot(data = trees_plant, aes_string(fill = paste("treepln", i, sep = ""))) +  
  geom_sf() +  
  scale_fill_distiller(palette = "Greens", limits = c(min(0), max(400)), direction = 1) +  
  labs(title = paste("Trees Planted in 20", i, sep = ""),  
    caption = "Data Source: Open Baltimore",  
    fill = "Number of Trees") +  
  theme_void())
```

```
for (i in 1:7){  
  ggsave(plot = twenty[[i]], file = paste("treeplnt",i,".jpg", sep = ""))  
}
```

```
## Saving 7 x 5 in image  
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```