```
census <- read.csv("tractdemographics.csv")
```

```
options(tigris_year = 2021)
```

```
address <- address_ranges(24, 031)
```

```
##   |                                                                      |
```

```
water <- area_water(24, 031)
```

```
##   |                                                                      |
```

```
roads <- primary_roads(2021)
```

```
##   |                                                                      |
```

```
mocotract <- tracts(24, 031)
```

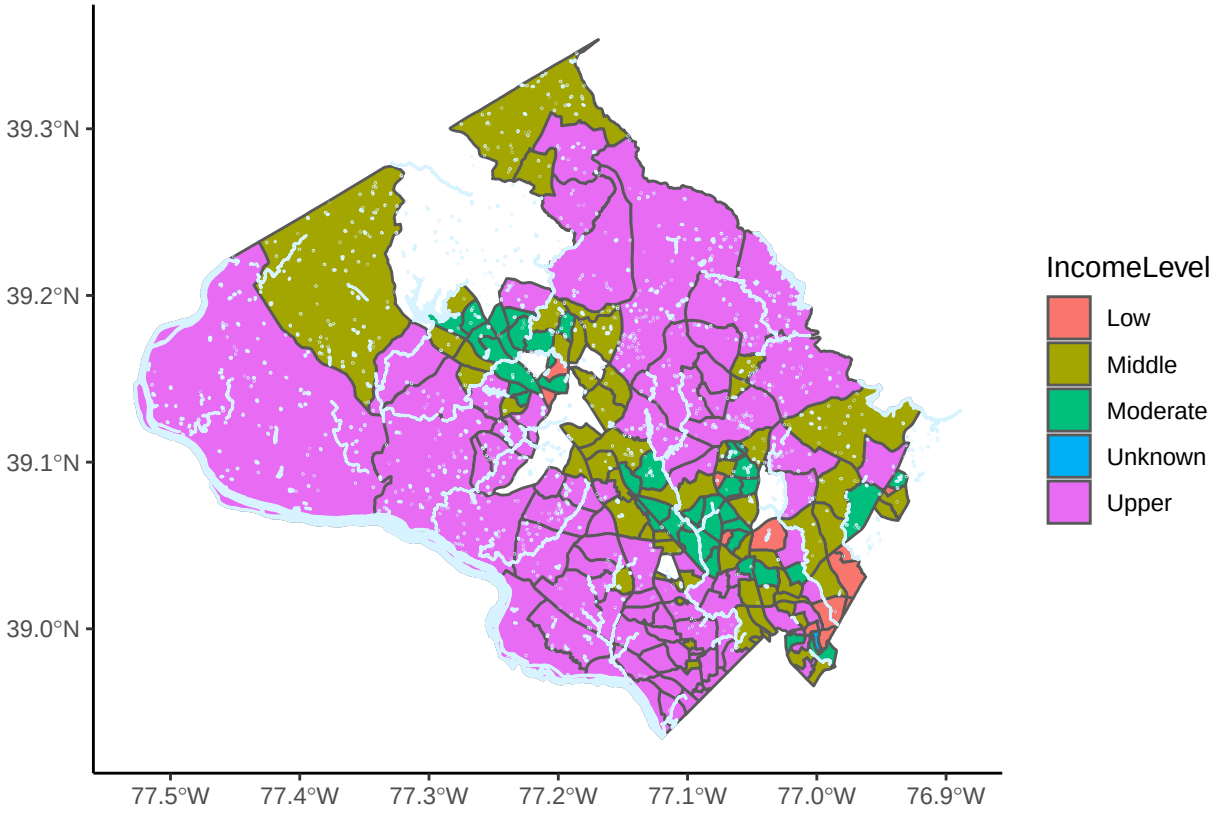
```
## Downloading: 16 kB     Downloading: 16 kB     Downloading: 16 kB     Downloading: 16 kB     Downloadi
```

```
census <- census %>%
  rename(NAME= ï..Tract.Code, IncomeLevel= Tract.Income.Level, PercentOverTheMedian= Tract.Median.Family
```

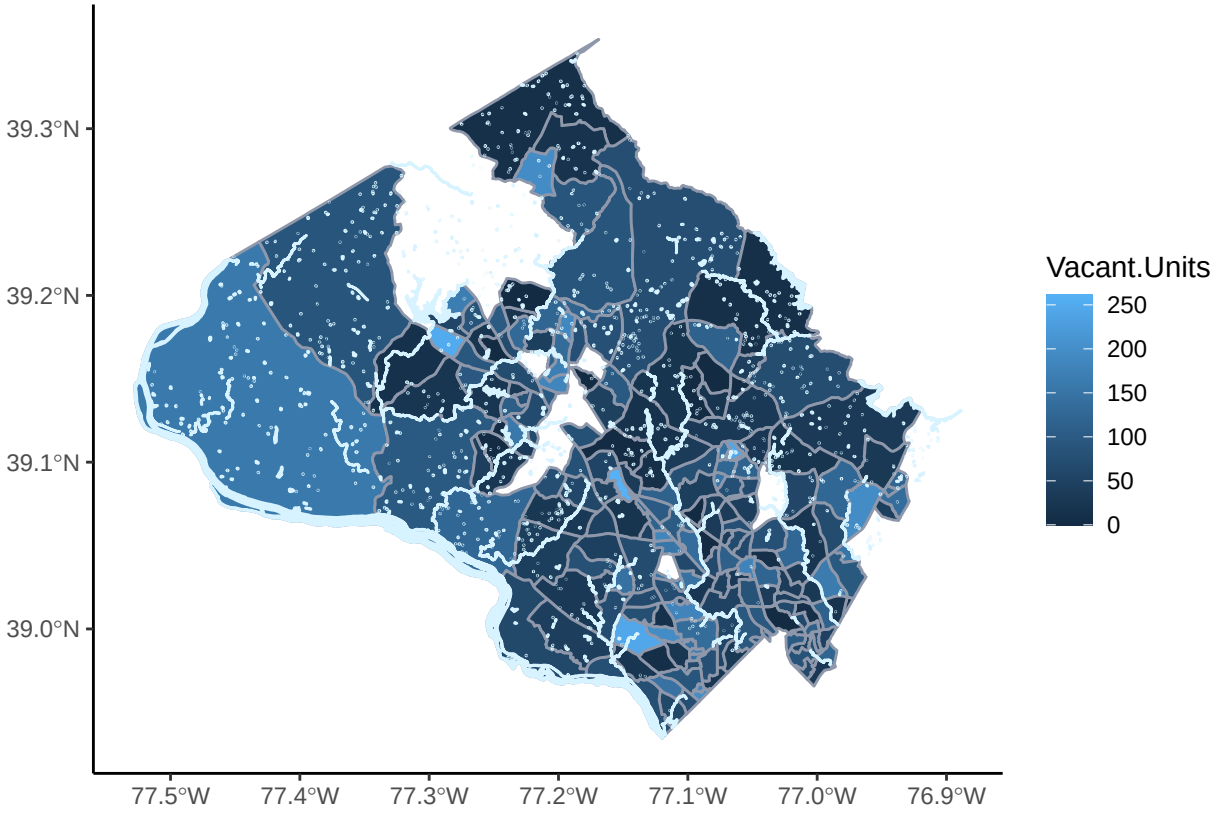
```
vector <- census %>%
  select(NAME)
geogvector <- mocotract %>%
  select(NAME, geometry)
geogvector$NAME=as.numeric(geogvector$NAME)
vector1 <-vector$NAME
vector2 <-geogvector$NAME
matched<-cbind(match(vector2, vector1))
matched2 <-cbind(match(vector1, vector2))
geogvector <- geogvector %>%
  cbind(matched) %>%
  filter(matched!='na') %>%
  select(NAME, geometry)

geogvector <- geogvector[order(geogvector$NAME),]

censusmix <- census %>%
  cbind(matched2) %>%
  filter(matched2 !='na') %>%
  cbind(geogvector)
```

```
censusmix<-censusmix[,c(1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17, 18, 19, 22)]
```

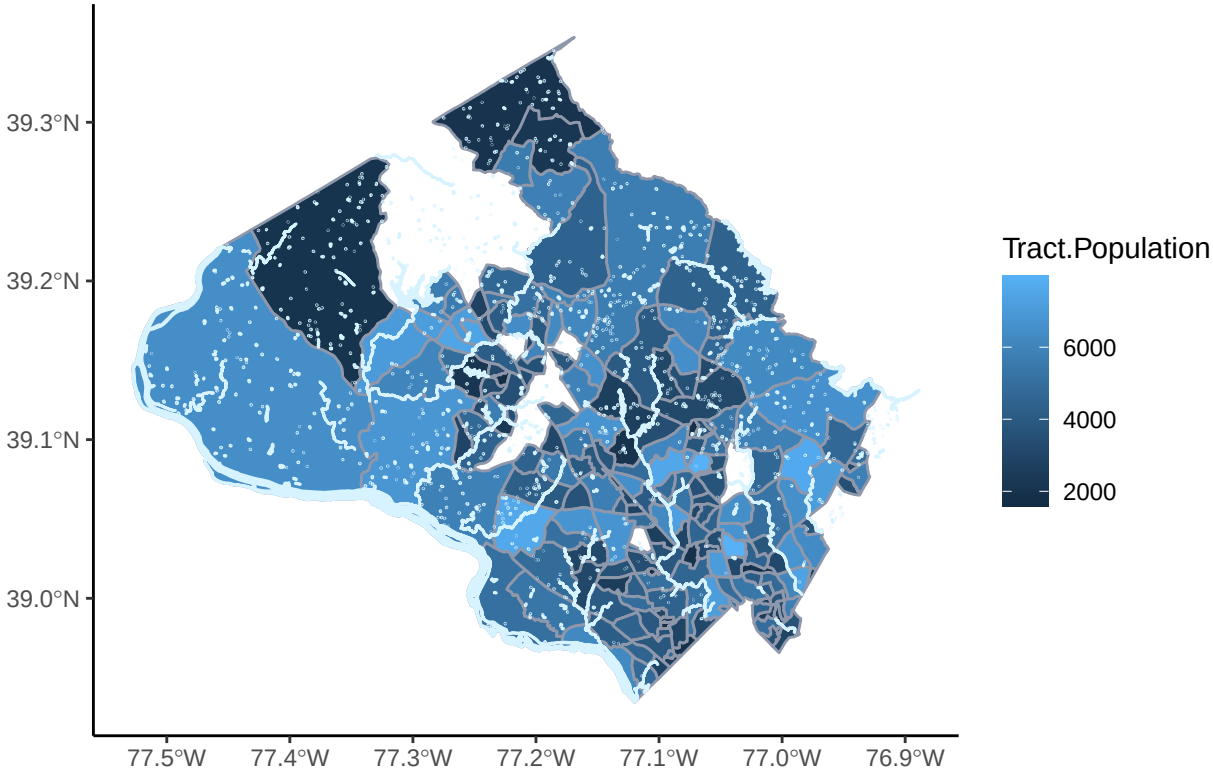
```
censusmix%>%
  ggplot() +
  geom_sf(aes(geometry=geometry, fill=IncomeLevel)) +
  geom_sf(data=water, color="#D6F3FF", fill="#D6F3FF") +
  theme_classic()
```




```
censusmix%>%
  ggplot() +
  geom_sf(aes(geometry=geometry, fill=Vacant.Units ), color = "#8f98aa") +
  geom_sf(data=water, color="#D6F3FF", fill="#D6F3FF") +
  theme_classic()
```




```
censusmix%>%
  ggplot() +
  geom_sf(aes(geometry=geometry, fill=Tract.Population ), color = "#8f98aa") +
  geom_sf(data=water, color="#D6F3FF", fill="#D6F3FF") +
  theme_classic()
```


39.3°N
39.2°N
39.1°N
39.0°N
77.5°W
77.4°W
77.3°W
77.2°W
77.1°W
77.0°W
76.9°W
Tract.Population
6000
4000
2000