TidyTuesday: San Fransisco Trees

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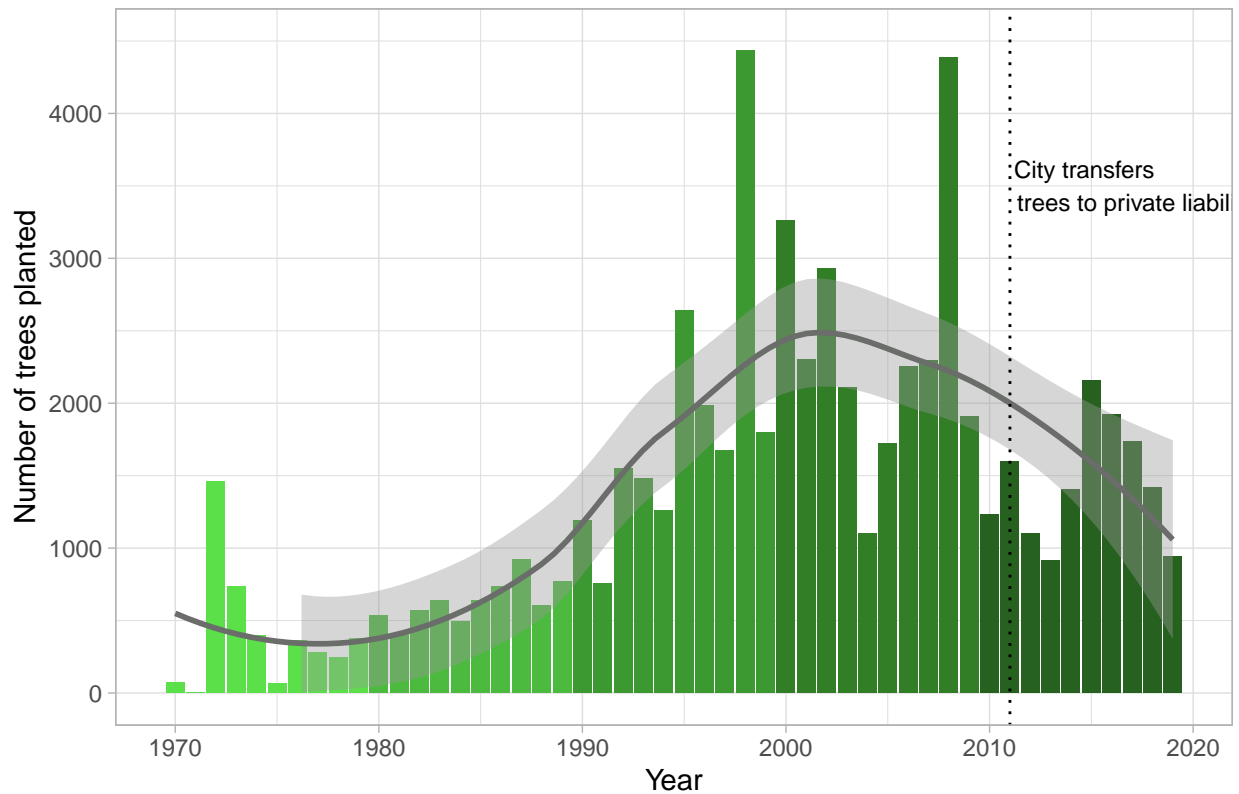
San Fransisco Trees

Tidy Tuesday with R Ladies Freiburg 01/28/2020

Trees planted in San Francisco since 1970, showing the year the city transferred liability of trees (and their upkeep) to private citizens. This ordinance was reversed in 2016 but without funds set aside for planting new trees.

```
ggplot(sf_trees %>% filter(year >= 1970 & decade != 2020)) +
  geom_bar(aes(x=year, fill=as.factor(decade))) +
  geom_smooth(
    data=sf_trees %>% filter(year >= 1970 & decade != 2020) %>% group_by(year) %>%
      summarise(count=n_distinct(tree_id)),
    aes(x = year, y = count), method = "loess", color="#6A6D6A") +
  scale_fill_manual(values=c("#5BE04A","#4CBA3E","#3C9830","#317E27","#26611F"))+
  ylim(0,4500)+
  theme_light()+
  xlab("Year")+
  ylab("Number of trees planted")+
  ggtitle("Number of trees planted per year in San Francisco")+
  geom_vline(xintercept=2011, linetype=3) +
  theme(legend.position="none")+
  annotate(geom="text", x=2011, y=3500, label="City transfers\ntrees to private liability", hjust=-.03,
```

Number of trees planted per year in San Francisco


```
ggplot(sf_trees %>% filter(year >= 1970 & decade != 2020)) +
  geom_bar(aes(x=year, fill=as.factor(decade))) +
  geom_smooth(data=sf_trees %>% filter(year >= 1970 & decade != 2020) %>% group_by(year, caretaker_binar
             aes(x = year, y = count), method = "loess", color="#6A6D6A")+
  facet_wrap(~caretaker_binary)+
  scale_fill_manual(values=c("#5BE04A","#4CBA3E","#3C9830","#317E27","#26611F"))+
  ylim(0,4000)+
  theme_light()+
  xlab("Year")+
  ylab("Number of trees planted")+
  ggtitle("Number of trees planted per year in San Francisco\nsince 1970 by private and public caretake
  geom_vline(xintercept=2011, linetype=3) +
  theme(legend.position="none")+
  annotate(geom="text", x=2011, y=3500, label="2011: City transfers\ntrees to private liability", hjust=
```

```
## Warning: Removed 1 rows containing non-finite values (stat_smooth).
```

```
## Warning: Removed 1 rows containing missing values (geom_bar).
```

```
## Warning: Removed 13 rows containing missing values (geom_smooth).
```

Number of trees planted per year in San Francisco since 1970 by private and public caretakers