Appendix 2: State-wise Modelling

```
knitr::opts_chunk$set(echo = TRUE)
library(tidyverse)
library(fable)
fires_clean <- read_rds(here::here("data", "fires_clean.rds"))

state_list <- fires_clean %>%
  as_tibble() %>%
  group_by(state) %>%
  group_split() %>%
  map(as_tsibble, index = date)

# Modelling
state_models <- state_list %>%
  map(~{
    .x %>%
      model(
        arima = ARIMA(fires),
        snaive = SNAIVE(fires)
      )
  })

# Forecasting
state_forecasts <- state_models %>%
  map(forecast, h = "2 years")

# Visualising
map2(state_forecasts, state_list, ~{
  current_state <- .y %>% pull(state) %>% unique()

  .x %>%
    autoplot(filter(.y, date > lubridate::ymd("2012-01-01"))) +
    ggtitle(glue::glue("Fires in {current_state}")) +
    ggthemes::scale_color_fivethirtyeight() +
    ggthemes::theme_fivethirtyeight()
})
```