Choropleth for continuous variables
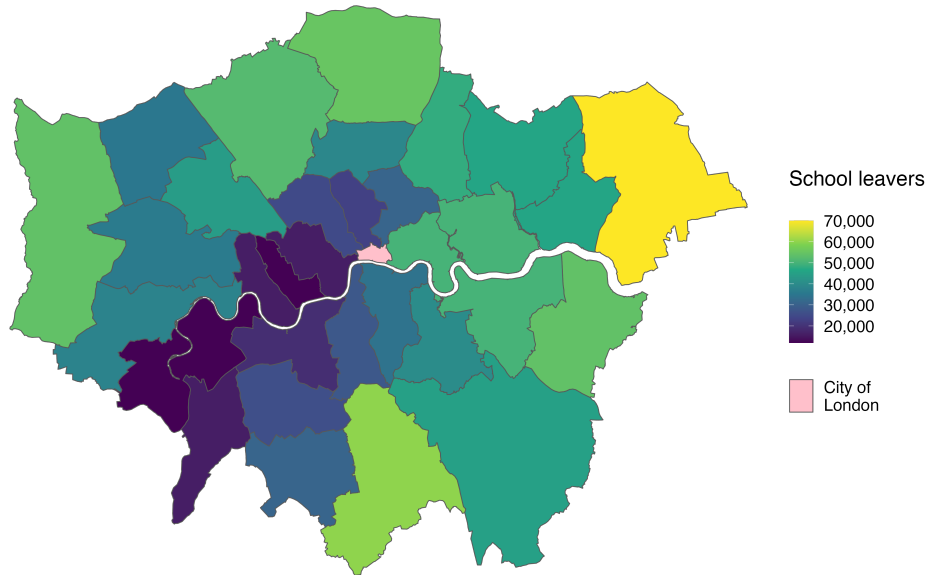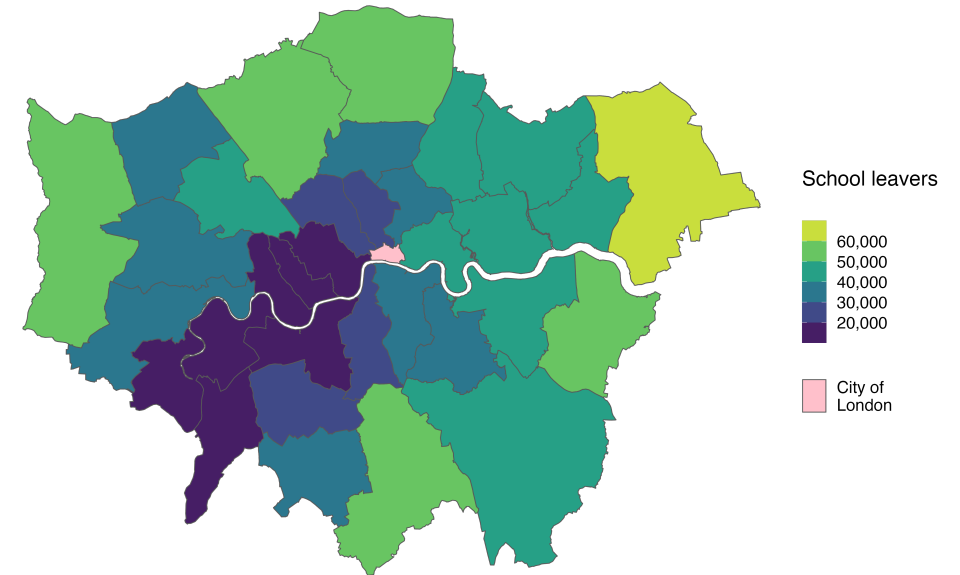
Choropleth of continuous variables

Continuous variable choropleth

Central London has fewer residents that left school at 16 (or under) than Outer London

Central London has fewer residents that left school at 16 (or under) than Outer London

School leavers

70,000
60,000
50,000
40,000
30,000
20,000

City of London

School leavers

60,000
50,000
40,000
30,000
20,000
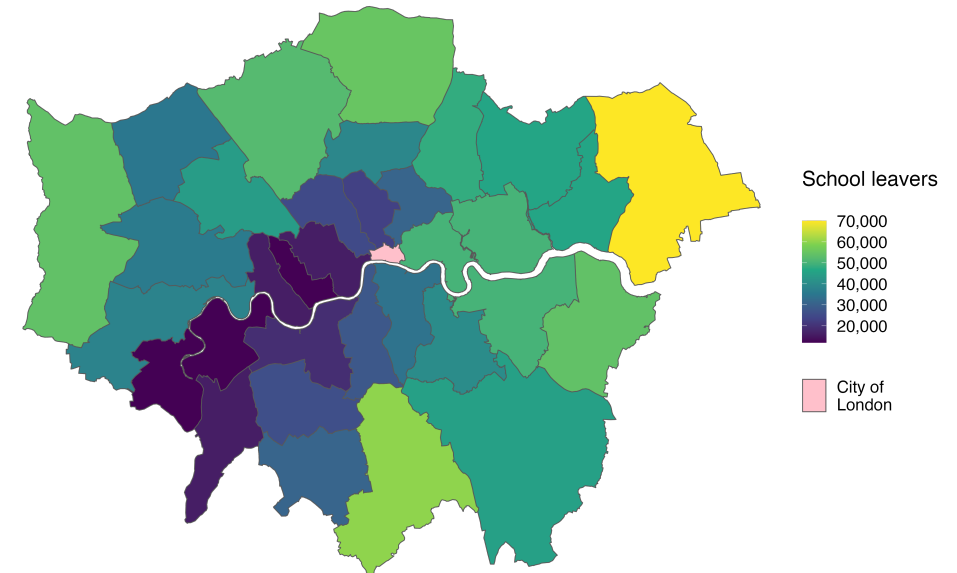
City of London

R for the Rest of Us

NA values and continuous choropleth

To label NA values in continuous choropleth we need to go through 3 steps:

- Find an unused aesthetic in the chart (the NA aesthetic)

- Override the guide for the NA aesthetic

- Set the `na.value` in the fill scale

Central London has fewer residents that left school at 16 (or under) than Outer London

School leavers

70,000
60,000
50,000
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30,000
20,000

City of London

Find an unused aesthetics 📏 in the chart

The continuous fill guides **do not have space** for an NA label.

We need to create a new guide - which means we need to choose an NA aesthetic

Good choices include:

- shape

- alpha

Override the guide 🏷 for the NA aesthetic

Now that we've created an aesthetic and corresponding guide, we need to override the aesthetics:

```
gg_chart +
  guides(shape = guide_legend(override.aes = list(fill = "pink")))
```

Set the `na.value` in the fill scale

While the continuous fill guides don't have space for a *label* they do allow us to set an `NA` *color*:

```
gg_chart +
  scale_fill_viridis_c(na.value = "pink")
```

Your turn

Use the `your-turn.R` script in `02_07` to build this map.

You'll need to add a guide item for District of California which has an NA value.

- Create an NA aesthetic

- Override the guide aesthetics

- Set the `na.value` for the fill aesthetic

State prison populations in the South Atlantic US

Prisoners in state prisons

75,000

50,000

25,000

District of Columbia