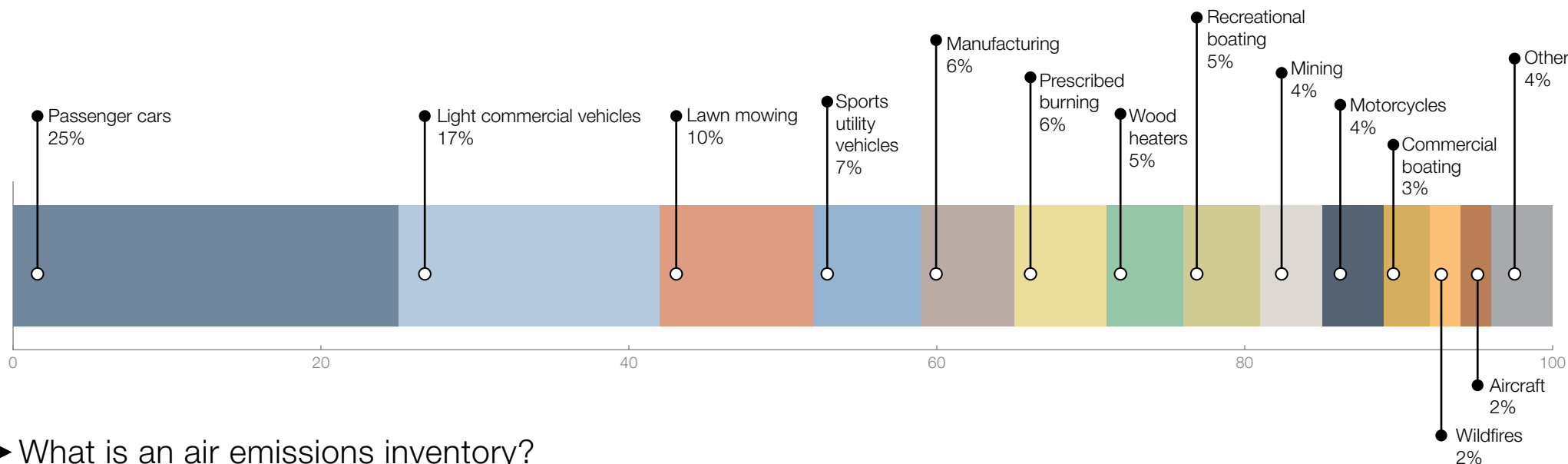




## Perth Air Emissions Study 2011–2012: Carbon monoxide (CO)

The Perth Air Emissions Study 2011–2012 estimated emissions from natural and man-made sources, and assessed the significance of these emissions. Emissions were also spatially allocated to identify major emission source areas.

Carbon monoxide (CO) is a toxic, colourless, odourless and tasteless gas. It is a common pollutant produced from combustion of fuel, coal, gas and wood.



### ► What is an air emissions inventory?

Air emission inventories assess the emissions that occur in an area. While some emissions are measured directly, others are estimated by combining activity data with scientifically developed emission factors.

### ► Biggest carbon monoxide source?

Vehicles produced 55% of all CO emissions.

Passenger vehicles were the biggest vehicle source due to their large population compared to other vehicle groups. However, other vehicle groups produced higher emissions per vehicle.

Lawn mowing was the largest domestic source. Solid fuel burning from domestic wood heaters was also a major emission source.

Combined, these two domestic sources were larger than all commercial and industrial CO sources estimated.

Bushfires, both prescribed or uncontrolled, produced 8% of CO emissions.

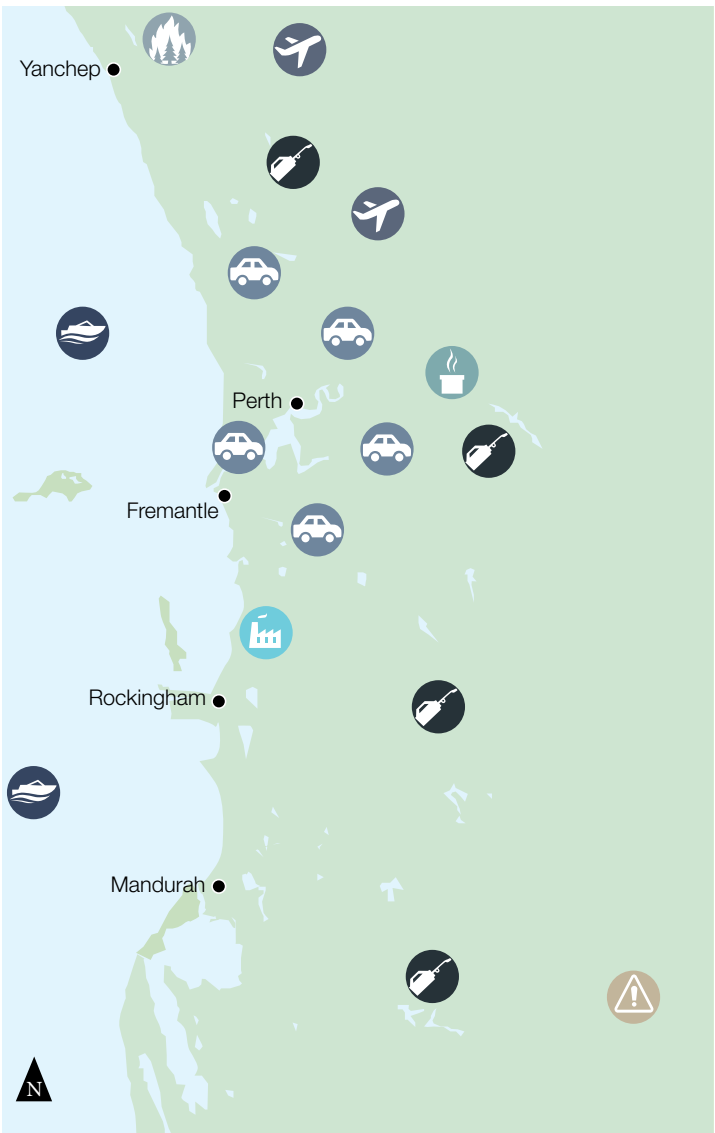
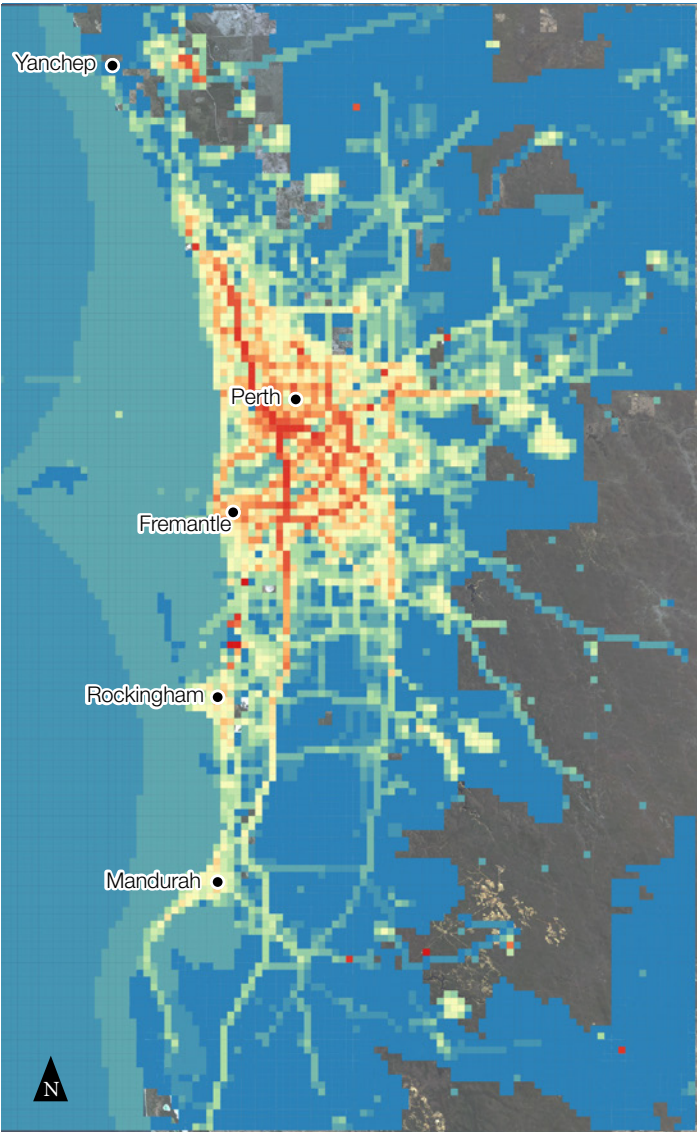
Bushfires were significant emission sources due to their intensity – emitting for a small amount of the year, but producing large emissions when they do.









### ► For more information

Visit: [www.der.wa.gov.au/our-work/programs](http://www.der.wa.gov.au/our-work/programs)

Contact: [npi@dwer.wa.gov.au](mailto:npi@dwer.wa.gov.au)

# Emission Hotspots



- Legend**
-  Bushfire event.
  -  Most CO emissions are concentrated along major roads (freeways and highways).
  -  The Kwinana Industrial Area contains several heavy industries reporting to the National Pollutant Inventory, which are major sources of CO.
  -  Marine CO emissions are the result of commercial and recreational boating activities.
  -  The influence of aircraft take-off and landing CO emissions can be seen from some airports.
  -  In the less dense Perth Hills suburban areas, the influence of wood heater smoke is the main source of CO.
  -  Prescribed burning emissions cover large areas.
  -  Some emission estimates are based on suburb-level census data. The small amount of emissions in large suburbs outside of the main Perth metropolitan area were allocated over the entire suburb, which resulted in the map being more 'blocky' around the edges.

