

Aerial imagery FAQs

What is aerial imagery?

Aerial imagery is photography taken from an aircraft at a predetermined altitude and commonly along a predetermined flight path.

Landgate's processed aerial imagery possesses the following attributes and is referred to as an ortho-mosaic:

- captured in the visible spectrum and perpendicular to the earth's surface;
- ortho-rectified, and
- geo-referenced.

Visible spectrum refers to the portion of the electromagnetic spectrum that is visible to the human eye.

A mosaic is a single image typically over a large area, that is made by assembling individual, ground controlled aerial 'photographs' to form a seamless photographic representation of a portion of the earth's surface.

Ortho-rectified means the imagery is geometrically corrected so the scale is uniform and horizontal distances can be measured. It has been adjusted for topographic relief, lens distortion, radial distortion and camera tilt.

Geo-referenced means the coordinate systems in a mosaic (or image) can be related to a ground system of geographic coordinates.

Is near infra-red imagery available?

No, although it may become available.

What is the coverage?

Landgate's possesses an extensive archive over Western Australia. Typically, the Perth metropolitan area is captured bi-annually, with sub-regional centres (eg Bunbury, Geraldton etc) flown annually. Rural townsites are captured ad hoc (every 2 to 5 years depending upon population and activity), with aboriginal communities captured as directed by [Department of Planning Lands & Heritage](#). The rest of the state is underpinned by a capture of [1:100k map tiles](#)

What resolution is the imagery?

The resolution of the imagery will vary depending on a range of factors. The Perth metro is available from ~20cm (scanned from analogue frames) up to 10cm. The sub-regional centres are more recent acquisitions and available at 10cm, as are town sites and aboriginal communities. The 1:100k map tiles (over rural and remote WA) are at 50cm.

How old is the imagery?

Landgate has been undertaking an imagery capture program over Western Australia since the 1950's. Perth metro starts from 1948 and is available at approximately 5 year epochs up to 2000, when it becomes yearly, In 2011 it is bi-annual and from 2015 to 2018 it is quarterly. It is currently refreshed in the summer and winter each year and available approx. 6 weeks from completion data of the capture.

Sub-regional centres have been captured since the late 1990s in most instances, with intermittent availability from the 1950s. Rural townsites are captured ad hoc (every 2 to 5 years depending upon population and activity), with aboriginal communities captured as directed by [DPLH](#). The underlying [1:100k map tiles](#) that make up the majority of the state are updated as a function of which [zone](#) they are located with. This can vary between 2 and 10 years.

How do I access the imagery?

The imagery can be accessed as a [SLIP](#) subscription through Landgate. There are is a choice of [3 imagery services](#) – WA Now, Perth Metro and WA Regional

Is historical imagery accessible?

Whilst the archive does reach back to 1948, not all years of capture have been digitised and converted into ortho-mosaics. In the Perth metro, imagery is available at approximately 5 year epochs up to 2000, then at least annually after that point. However, the missing years are being be added progressively over time as they are converted into a digital format.