

# Urban Forest data – Technical summary

## Access

The Urban Tree Canopy dashboard is available for public viewing on the Western Australian State Government's [Better urban forest planning](#) web page.

State and local government agencies can access the related spatial data files through Landgate's SLIP system via [data.wa.gov.au](http://data.wa.gov.au).

## Spatial extent

The Perth and Peel planning regions of Western Australia are targeted for image capture.

Due to variations in flight path and imaging conditions, some areas may not receive complete imaging during each capture.

## Frequency and timing

Image capture is scheduled to occur in January of each year.

Data processing and reporting is scheduled to occur following image capture every two years.

## Description

### Urban forest mapping

Once high resolution digital imagery is captured, the CSIRO's Urban Monitor program, processes the raw data into summary statistics to determine vegetation height by strata of 0-0.5 metres (including grass), 0-3 metres, 3-8 metres, 8-15 metres and 15+ metres by parcel.

This data is further processed by DPLH into spatial and dashboard data.

Vegetation coverage greater than three metres in height is deemed tree canopy. The tree canopy strata have been aggregated and reported as total canopy coverage in square metres, percentage of total parcel area and percentage range.

Information is summarised to [ABS Mesh Block boundaries](#) and parcels (lots) according to State Government land cadastre records.

Urban forest mapping metadata is available at [data.wa.gov.au](http://data.wa.gov.au) by navigating to the relevant urban forest dataset.

## Land use categories

Urban forest land use categories are determined by a combination of ABS Mesh Block and cadastre information.

- **Street blocks** – includes a combination of lots zoned for residential, commercial, industrial, hospital/medical, educational, and some agricultural and transport uses.
- **Roads** – includes the reserved verges of roads and streets managed by the State and local governments.
- **Parks** – includes public parks, open space, private recreation/sporting grounds and State forest.

New in 2024:

- **Other Infrastructure** – includes lots zoned for infrastructure except for those in ‘Roads’ and includes lots purposed for public utilities.
- **Water** – includes lots not included in ‘Roads’ or ‘Other Infrastructure’, and those where land cover is predominantly water.
- **Rural** – includes lots which are not captured in the above categories, and are zoned for agricultural or rural use, or are otherwise described as rural.
- **Other** – includes all lots not captured in any of the above categories.

## Urban Tree Canopy Dashboard

The dashboard summarises Urban Forest Mapping data into easy to understand metrics such as percent cover or area of coverage by vegetation height or land use category and can be explored at LGA and Suburb scale.

## Changes in data processing

### 2020 and prior

#### *Focus and intent:*

Local governments could track canopy cover changes over time across areas they influenced.

#### *Data implications:*

- Land use categories focussed on Roads, Street Blocks, and Parks as these were of greatest interest to local governments.
- Where aerial imaging was incomplete for a given parcel, that area was omitted in the capture and subsequent capture years to ensure comparability of data.
- The parcel boundaries were fixed to 2016 to facilitate like-for-like comparison across years.

## 2024

### ***Focus and intent:***

Capture and report on data with as much spatial accuracy and completeness as possible.

### ***Data implications:***

- Land Use Categories have expanded to include 'Other' (comprised of Rural, Water, Other Infrastructure and Other categories).
- All parcels with complete imaging (+/- 5% threshold) are included.
- Contemporary parcel boundaries are used to facilitate local scale management decision-making.

## Uncertainties

- 2024 data is not fully comparable with previous captures by land use, but future years will be comparable.
- Re-inclusion of forested areas at boundary that were previously removed may appear as a substantial increase in total percentage canopy cover for Perth and Peel.
- Updating the cadastre from 2016 to 2024 introduces boundary realignments and changing land use that may influence 2024 summary statistics when compared with previous years.