



Australian Research Centre  
for Urban Ecology

## GIS DATA SET

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<b>Name:</b>	<b>OSPACE</b>
<b>Full name:</b>	<b>Open Space</b>
<b>Spatial Extent:</b>	<b>Greater Melbourne</b>
<b>Owner:</b>	<b>Australian Research Centre for Urban Ecology (ARCUE)</b>
<b>Custodian:</b>	<b>ARCUE</b>
<b>Abstract:</b>	<b>The ARCUE Open Space data set contains polygons that represent areas of open (green) space in the Melbourne Metropolitan region. This version of the data set is current as at 1999.</b>

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### Application of Data Set:

#### General:

The Open Space data set depicts areas in the Melbourne Metropolitan region (as defined by the ARCUE Metropolitan Melbourne data set) that are identifiable as open (green) space.

### Data Currency Information:

#### Data Collection:

Collection Period:	Source data was collected by ARCUE in 1999. The source data may have earlier collection dates.
Update Frequency:	As required.

### Data Lineage and Quality:

#### Data Set Source:

The polygonised open space areas are based on a variety of sources:

- An existing digital data set, Metropolitan Open Space (MOS), was provided by Parks Victoria
- Digital and hard-copy maps were supplied by local councils
- The Melway street directory (Greater Melbourne) was used to provide additional source data

#### Data Set Production Methods:

The ARCUE Open Space data set extends across the area defined by the ARCUE Metropolitan Melbourne data set. This area encompasses 31 Local Government Areas (LGAs). Some of the outer LGAs are intersected by the

Metropolitan Melbourne data set, as they are not classified entirely as urban. In this case, only the section of the LGA designated as urban is covered by the Open Space data set.

Initially, the MOS data set was clipped to each of these 31 LGAs, creating 31 shapefiles. These clipped shapefiles were then examined and edited individually. For each LGA, additional source data (digital data sets from council, hard-copy plans and Melway street directory) were used to identify open space polygons to add to the data set, identify any polygons to be deleted and to attribute items for each open space polygon. All of the data editing was undertaken in ArcView, using on-screen digitising to add polygons where required. Base data sets, such as the State Digital Road Network (SDRN), supplied by Land Victoria, were used to align added polygons.

Polygons were added, deleted and attributed to suit ARCUE's requirements for the data set, based on pre-defined rules and conditions. The rules and conditions were developed by ARCUE, as was the list of possible reserve types.

The 31 individual LGA data sets were then merged into the final data set, covering the Melbourne Metropolitan region. This data set was checked for positional and attribute accuracy.

**Positional Accuracy:**

Positional accuracy of source material: various

The MOS data set has a given positional accuracy that is the same as the cadastre used to create it.

Other source data sets used have varying degrees of positional accuracy.

Errors due to the conversion process: none

Errors due to the manipulation process:

Polygons added to the source data sets have been digitised on-screen, in ArcView. These are only accurate to (at best) the level of the background data sets used for reference, largely the SDRN. Land Victoria gives "a conservative estimate of 5m...for the standard deviation of the SDRN within the Melbourne Metropolitan area". The accuracy of the added polygons can therefore be said to be not better than 5m.

Total positional accuracy: not better than 5m

**Attribute Accuracy:**

The attribute values added to the data set were based on all available sources, and are reliant on the accuracy of those sources. Where discrepancies existed between source material, local council data sets were given precedence over other sources.

All attributes were checked for completeness and validity.

**Completeness:**

Open Space data for the current area defined by ARCUE as Metropolitan Melbourne is complete.

**Data Coordinate System:**

<b>Datum:</b>	AGD66
<b>Spheroid:</b>	ANS
<b>Projection:</b>	Universal Transverse Mercator (UTM)
<b>Coordinate System:</b>	Australian Map Grid (AMG)
<b>Unit of Measurement:</b>	metres
<b>Zone:</b>	55

**Data Set Features and Attributes:**

The Open Space data set contains 7,716 polygons.

Field	Type	Description
area	Integer(12.4)	Polygon area (m2)
reserve_type	Character(32)	As listed below
public	Character(4)	As listed below

reserve_type	Description	Polys.
Airport	Airport land	4
Armed Forces	Army, Airforce and Navy bases and barracks	5
Educational Institution	Secondary and Tertiary institutions with a large component of green space	36
Managed Reserve	Reserves that have obvious management in place or controlled access. Includes cemeteries, zoos, community farms, heritage buildings and gardens, flora and fauna reserves, botanic gardens and wetlands.	102
Managed Reserve - PV	Reserves managed by Parks Victoria	147
Melbourne Water	Melbourne Water reservoirs	9
Open Space	Public open space, not necessarily designated as a reserve or park	135
Plantation	Plantations	3
Police	Police Academy grounds	1
Reserve/Park	Public reserves or parks	6411
Scouting Association	Scout parks or camps	9
Significant Flora Site	Site of significant flora, not necessarily designated as a reserve or park	26
Sporting/Recreation	Sports grounds or reserves designed for active recreation. Includes golf courses.	828

<b>Public</b>	<b>Description</b>	<b>Polys.</b>
NO	NO public access Airports, Armed Forces, Secondary Educational Institutions, Melbourne Water reservoirs, Plantations, Police, and other reserves that are not generally accessible to the public. Also includes proposed parklands not yet opened to the public.	87
RES	RESTRICTED public access Tertiary Educational Institutions, Managed Reserves, Scouting Association, golf courses and major sporting venues, and other reserves where access is restricted to a subset of the population or requires payment of a fee.	245
YES	FULL public access All publicly accessible reserves	7384

**Further Information :**

The Open Space data set was originally created by ARCUE for use in their research projects into urban ecology in Greater Melbourne. The types of open spaces added to the data set were determined by ARCUE to be those most relevant to urban ecology. Although essentially a data set showing public open spaces, the data set does contain areas with NO public access. These areas were included as they can provide ecological services to the urban environment and are therefore useful in this data set.

The Open Space data set does not include potentially green space such as:

- Private land (other than that which can be readily identified as green space)
- Crown land used as public open space but not necessarily designated as such
- New subdivisions after 1999
- Median strips, nature strips, or street trees
- Buffer zones of rivers and railway lines
- Bicycle paths

Ideally, in the future, some of these additional green spaces may be added to the data set. It is also hoped that the data set will be gradually field checked for completeness.

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The ARCUE Open Space data set is supplied free of charge for research and non-commercial purposes, on the agreement that any updates or corrections performed on the data set be provided back to ARCUE. It is also required that ARCUE is acknowledged as the owner of the data set on all published material that reproduces the data set or refers to it in any way.

ARCUE cannot warrant the accuracy or completeness of the Open Space data set, and any person using or relying upon this information does so on the basis that ARCUE shall bear no responsibility.