

Amenity and Use



convenient facilities

Overview



Indicator name	Public space		
Indicator number	9	Indicator type	Core
Objective	To measure walking access to public spaces and the proportion of land that is reserved for public space		
Application guidance	<p>To foster social value (participation, social contact and cohesion), local community facilities that enable people to come together both regularly or in times of crisis, and street space that can be used temporally to host social events such as weekly markets or seasonal concerts should be provided.</p> <p>This indicator will support practitioners to understand how accessible public space is to a community. Based on the outcome of the assessment, practitioners can determine whether consideration could be given to increase access to public space, either through the creation of new public space, increased housing density, or additional pedestrian access routes.</p> <p>Practitioners can use the <i>population accessing public space</i> metric to measure the population within 5- and 10-minute (400m and 800m) walking catchments of public space.</p> <p>Practitioners can use the <i>proportion of public space</i> metric to measure the percentage of existing public space accessible to the community.</p>		

Metric



- Population accessing public space
- Proportion of public space

Recommendation



N/A

Related indicators



Access and Connection

- 2 Walking paths
- 3 Cycling accessibility
- 4 Public transport accessibility



Amenity and Use

- 10 Local living
- 14 Mix of uses
- 15 Population density



Green and Blue

- 19 Tree canopy



Character and Form

- 33 Culture and heritage



Metric – Population accessing public space

Metric unit	Percentage (%)
Description	To measure the population within a 5- or 10-minute walking catchment of public space
Spatial coverage	NSW Urban areas
Spatial application	This metric is most suitable for area-based analysis based on mesh block level
Calculation methodology	<p>Obtain and define public space datasets</p> <ol style="list-style-type: none">Obtain the following datasets for inclusion in the analysis:<ul style="list-style-type: none">DPIE public space locations for the 20 most populous urban areas in NSWAdditional data collection for other urban areas not included in the 20 most populous urban areas using the same definitionNSW Spatial Services Points of InterestDPIE LEP Land Zoning data (where SYM_CODE = RE1 or RE2)New South Wales National Parks and Wildlife ServiceDissolve and explode data to create a spatially unique dataset of public spaceIntersect point of interest dataset with the Digital Cadastral Database polygons to produce a polygon representation of where these features are locatedCreate point dataset of public space locations by combining the following datasets:<ul style="list-style-type: none">Sydney Open Space Audit (2016)NSW Points of Interest, where POITYPE =<ul style="list-style-type: none">Art GalleryBeachCliffHeadlandLibraryLookoutMonumentMuseumObservatoryParkPicnic AreaShowgroundSports CourtSports Field <p>Create entry point for public space</p> <ol style="list-style-type: none">Model entry points for public space as per Greater Sydney Commission (GSC) Pulse methodology where points are placed at 10-metre intervals around all public space boundary polygons and the point closest to a road segment (within 50 meters) was selected as a potential entry pointUse National Parks sign data to create point features for entry into national parks("d_AssetTyp" LIKE '%Park Entr%' OR "d_AssetTyp" LIKE '%Ident%') <p>Perform network analysis</p> <ol style="list-style-type: none">Use road network data to conduct 400m and 800m walking catchment analysis from the entry point of public space <p>Calculate population within catchments</p> <ol style="list-style-type: none">Overlay walking catchments with mesh blocks to calculate the proportion of mesh block within the 5- and 10-minute catchmentsApply the proportion of mesh block within the walking catchments to the population to produce the attributes Pop16_5Walk and Pop16_10Walk



Metric – Population accessing public space (Cont.)

Calculation methodology

Data representation

10. Assign colour based on the classification below

Unit: Percentage of population with 10-min walk of public space (%)



Assumption

- Public space is defined as all places publicly owned or for public use, accessible and enjoyable by all for free. They include active and passive spaces (ie. parks, gardens, playgrounds, public beaches, riverbanks and waterfronts, outdoor playing fields and courts, and publicly accessible bushland) and public facilities (ie. public libraries, museums, galleries, civic/community centres, showgrounds and indoor public sports facilities).
- It is assumed 400m and 800m is the average distance covered by a 5- or 10-minute walk, respectively
- The Premier's Priority for access to open space reports the number of homes (as derived from Sydney Water data) within 400m and 800m walking distance
- While it is recognised that a walking catchment analysis for both the GSC Pulse reporting and for the DPIE Premier's Priority 11 is primarily undertaken from the centroid of public space, the analysis method proposed for this metric is to calculate walking catchments based on entry point data (where available) or modelled entry points to public space
- Public space does not include the road reserve
- The proportional population calculation has a uniform population spatially across the mesh block
- Points of interest encompass the whole cadastral parcel in which they are located and do not include additional parcels of land
- In lieu of detailed data collection, the entry point to public space will be modelled using the methodology described above. Network analysis (400m and 800m walking) should be conducted from the modelled entry points of open space (preferred approach).
- Urban areas are defined by the Australian Bureau of Statistics (ABS) Sections of State (SOS) as populations greater than 200 people. Those areas of NSW outside SOS are deemed to be open space and, as such, are not included in the analysis.
- The modelling conducted for the Pulse reporting by GSC on access to open space utilises a walking analysis from the centroid of a mesh block. If the centroid of the mesh block is within the desired distance of open space, the whole mesh block population is considered to have access to open space.

Limitation


- The currency and completeness of the datasets are limited to the best available data to define public space
- Analysis does not include the road reserve
- Analysis of walking catchment uses a road network approach optimised for pedestrians but does not take into consideration gradient, accessibility or other walkability factors

Data source

- DPIE, Public Space Location and Access
- NSW Spatial Services Points of Interest: datasets.seed.nsw.gov.au/dataset/nsw-points-of-interest-poi
- TfNSW Road Track Path Network
- ABS Mesh Blocks 2016: abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1270.0.55.001July%202016
- New South Wales National Parks and Wildlife Service Estate: datasets.seed.nsw.gov.au/dataset/nsw-national-parks-and-wildlife-service-npws-estate3f9e7
- New South Wales National Parks and Wildlife Service Asset Infrastructure Sign: datasets.seed.nsw.gov.au/dataset/asset-infrastructure-sign
- DPIE, Greater Sydney Public Open Space Audit (2016): gsc-public-1.s3.amazonaws.com/s3fs-public/Greater_Sydney_Open_Space_Audit.pdf



Metric – Proportion of public space

Metric unit	Percentage (%)						
Description	To measure the percentage of a Travel Zone (TZ) that is comprised by public space						
Spatial coverage	Applicable to all NSW						
Spatial application	This metric is most suitable for area-based analysis based on travel zones						
Calculation methodology	<p>Obtain public space area data</p> <p>1. As per the <i>population accessing public space</i> metric, create a polygon dataset of public space locations within sections of state for NSW</p> <p>Calculate percentage of public space in mesh block</p> <p>2. Overlay the public space polygons with travel zones to calculate the percentage of the travel zone covered by public space and save as the attribute PerPublicSpace</p> <p>Data representation</p> <p>3. Assign colour based on the classification below</p> <p>Unit: Proportion of public space (%)</p>  <table><tr><td>0</td><td>1 – 10</td><td>11 – 25</td><td>26 – 50</td><td>51 – 75</td><td>> 75</td></tr></table>	0	1 – 10	11 – 25	26 – 50	51 – 75	> 75
0	1 – 10	11 – 25	26 – 50	51 – 75	> 75		
Assumption	<ul style="list-style-type: none">Public space is defined as all places publicly owned or for public use, accessible and enjoyable by all for free. They include active and passive spaces (ie. parks, gardens, playgrounds, public beaches, riverbanks and waterfronts, outdoor playing fields and courts, and publicly accessible bushland) and public facilities (ie. public libraries, museums, galleries, civic/community centres, showgrounds and indoor public sports facilities).Public space does not include the land within the road reserveManual data collection (aerial photography or acquisition of datasets from the appropriate local government authority) could be undertaken to assess the area of the road reserve (not including carriageway) to be included in the percent of public spacePoints of interest encompass the whole cadastre parcel in which they are located and do not include additional parcels of landUrban areas are defined by the Australian Bureau of Statistics (ABS) Sections of State (SOS) as populations greater than 200 people. Those areas of NSW outside SOS are deemed to be open space and, as such, are not included in the analysis.						
Limitation	<ul style="list-style-type: none">The currency and completeness of the datasets are limited to the best available data to define public spaceAnalysis does not include the road reserve						
Data source	TfNSW, Travel Zones 2016: opendata.transport.nsw.gov.au/dataset/travel-zones-2016						

Reference

- Greater Sydney Commission, The Pulse of Greater Sydney: Measuring what matters in the Metropolis (2020): gsc-public-1.s3-ap-southeast-2.amazonaws.com/s3fs-public/gsc_pulse_of_greater_sydney-2020_web.pdf?BWC0etOK0nm0J7ODABuuMsKdFQZxLS7N
- Department of Planning, Industry and Environment, Draft NSW Public Spaces Charter (2020): dpie.nsw.gov.au/_data/assets/pdf_file/0007/356065/nsw-public-spaces-charter-faq-2021-march.pdf
- UN HABITAT, Global Public Space Toolkit: From Global Principles to Local Policies and Practice (2015): unhabitat.org/sites/default/files/2019/05/global_public_space_toolkit.pdf