Spatial Services
Mapping and Spatial Services

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The ultimate sources of NSW data

Spatial Services' core business is land and property information. Geospatial data is gathered from ground surveys, aerial and satellite imagery and is used to produce a wide range of digital and hard copy products and services.

Spatial data

Spatial data is any information that describes the location and shape of geographical features on the earth and the relationships between them.

Spatial Services collects and maintains a wealth of fundamental spatial datasets which form the foundation of NSW Spatial Data Infrastructure (SDI).

Spatial Services plays a key role in developing the SDI, a framework that includes spatial datasets, along with the means for government and the spatial community to access, exchange, view and utilise this data.

The SDI is a critical framework that supports the provision of government services, such as natural resource, land management, urban planning, risk analysis, tourism, transport, communications, infrastructure, health and emergency services preparedness.

Common examples include cadastre, street addresses, topographical and surface model data, survey marks, satellite and aerial imagery.

Spatial data is made available to Spatial Services customers through a range of products they can access overthe-counter or online.

Survey control

The Survey Control Information Management System (SCIMS) is an online database that contains coordinates and related information for over 243,000 survey marks that form the official State Survey Control Network.

Continuously Operating Reference Stations (CORS) are a recent addition to the State Survey Control Network. These stations are permanent ground based Global Navigation Satellite System (GNSS) receivers that deliver high accuracy positioning solutions to nearby mobile GNSS receivers.

Spatial Services is currently expanding the CORSnet-NSW network to provide CORS services across NSW.

Spatial Services has developed an online Survey Services Portal (SSP) which is currently available to NSW registered surveyors and Spatial Services approved survey searchers.

The portal provides quick, cost-effective and reliable access to existing services including ePlan, SCIMS, document and plan enquiries, plan advice, lodgment and download of survey control locality sketch plans.

In addition, the SSP also provides access to new survey search resources including the Cadastral Records Enquiry (CRE), copies of charting and reference maps, map and plan indexes.

Over-the-counter searching services for survey control data and sketch plans are also available at Spatial Services' Queens Square office.

More details about SCIMS, CORS and the Survey Services Portal can be found at www.spatialservices.nsw.gov.au.

Digital Cadastral Database (DCDB)

The DCDB shows the legal boundaries of land parcels in NSW, including housing lots, roads, rivers, forests, national parks, reserves and administrative boundaries such as local government, mine subsidence, electoral and suburb. The DCDB is systematically maintained as subdivisions and boundary changes occur.

Geo-coded Urban and Rural Addressing System (GURAS)

GURAS contains street address information geo-coded to fiscal property as defined by Spatial Services' Valnet2 property valuation system.

GURAS is systematically maintained through updated DCDB and property description and address updates from the Valnet2 system.

Digital Topographic Database (DTDB)

The DTDB depicts the natural and built landscape of NSW. It contains spatial and attribute data defining features such as transportation, hydrology, land form, vegetation, buildings, dams and bridges.

The DTDB is maintained using the most current aerial and satellite imagery, remote elevation sensors combined with field data capture and verification.

Imagery

Aerial

Spatial Services has been cyclically undertaking aerial capture of the viewable landscape since 1947. This official record of the State's development is currently being preserved (by scanning the films) as a key component of the NSW Spatial Data Infrastructure.

Advanced digital imagery technology in the form of a Leica ADS40 digital sensor has replaced film based capture. In operation since July 2007, the acquisition program is primarily focused on covering the State's eastern and central divisions.

The digital system offers a superior product and enables Spatial Services to provide an improved imagery service.

Aerial imagery provides a valuable source of information for studying, monitoring, forecasting and managing natural resources, human activities and emergency events.

It is a powerful tool that can save time and money by enabling users to make better, faster and more informed decisions. Much of this imagery can be viewed online through the SIX Viewers at

www.six.nsw.gov.au.

Satellite

Spatial Services distributes a range of satellite image products to government agencies and their registered customers which is used for mapping, natural resources research, land management and conservation, civil engineering and urban planning purposes.

Digital maps and mapping data

NSW state reference map data

Spatial Services produces reference map datasets covering the whole of NSW as a base for mapping purposes. These databases contain the primary topographic data themes of transportation and hydrology as well as a basic text layer which can be overlaid with information from the Digital Cadastral Database.

Parish and historic maps

Parish and historic maps offer a link to the past and provide details for those interested in local history, family genealogy and information about land and property.

Spatial Services has converted these valuable maps to digital format to ensure they are retained as an historic record of land administration for the State. To date, Spatial Services has more than 35,000 parish and historic maps of NSW available online in full colour.

The current versions of many parish, charting

and reference maps are also available for viewing through the Historical Land Records Viewer at http://images.maps.nsw.gov.au/pixel.htm

Printed Maps

Topographic maps

Spatial Services produces a series of standard (1:100,000,

1:50,000, 1:25,000) scale hardcopy topographic maps of NSW.

Topographic maps show contours, spot elevations, rivers and streams, roads, buildings and/or built-up areas, place names, vegetation, cadastral and administrative boundaries.

Online access

Spatial Services' Spatial Information Exchange (SIX) portal creates a collaborative environment that promotes information sharing and cooperation among

the spatial community including government, professional and business users, as well as the general public.

SIX is a cross-government, shared service and is the official source of NSW's geospatial information, possessing the most comprehensive, accurate and reliable spatial data for the State.

The SIX Viewer provides integrated access to:

- property information such as street addresses, and cadastre
- points of interest
- roads, suburbs, localities, local government areas and electoral boundaries
- current and historical topographic maps
- medium resolution satellite imagery
- high resolution aerial imagery covering all major coastal and regional population centres
- 1943 historical aerial photography over Sydney suburbs.

The SIX Portal is the official gateway to NSW's spatial and textual information.

The portal offers an array of services and products to a vast group of clients including local, state and federal government agencies, commercial organisations and the NSW public.

Government agencies can access these products and services through an authorised SIX login. This site provides them with information and the necessary tools relating to land titling, property information, valuation data and spatial data – including dedicated spatial channels.

The general public can also browse through the public catalogue of spatial products – available at no charge – on the website and purchase products in the catalogue using the shopping cart facility, by logging in as a SIX guest.

SIX can be accessed at www.six.nsw.gov.au.

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