



LPI Spatial Datasets News

January 2005

NSW Spatial Data



Land and Property Information (LPI) provides products and services to the conveyancing, planning, development and spatial services communities in both commercial and public sectors. LPI's role includes maintenance of an up-to-date cadastre and the NSW spatial data infrastructure through mapping and survey services. LPI is working to improve delivery of services to the community through implementation of Electronic Service Delivery capabilities which efficiently meet customer requirements.

To better meet the requirements of NSW spatial data customers, LPI is investing in development and capital improvement of the following:

- NSW Cadastre - upgraded access and maintenance arrangements;
- NSW Cadastre - development of a single land cadastre;
- Road Centrelines - fundamental dataset improvement;
- Geocoded Street Addresses - dataset improvement; and
- Topography - implementation of theme-based maintenance.

Some upgraded capabilities are already under implementation, including online access to

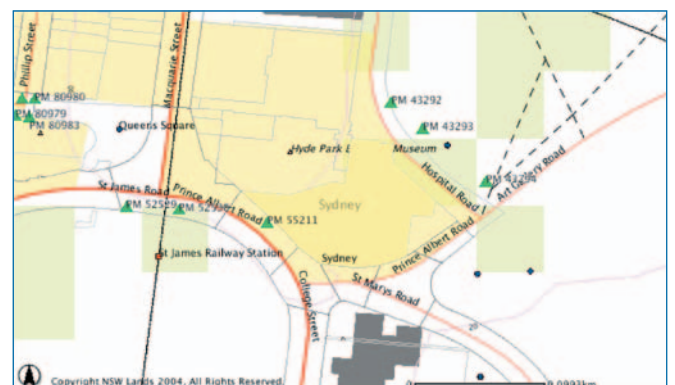
fundamental NSW mapping datasets for the community, through Land's GeoSpatial Portal at www.maps.nsw.gov.au.

LPI is conducting market research with spatial data customers to confirm client needs and ensure LPI provides better services to meet NSW spatial data customer requirements. Research will continue to be undertaken as improved capabilities are brought online during 2005-06.

While this program of spatial data improvement remains in process, LPI will also issue 'Spatial Datasets News' updates periodically throughout 2005.

The newsletter intends to keep customers informed of developments, and position themselves to gain maximum benefit from improved capabilities as these are made available.

NSW Cadastre - upgraded access and maintenance arrangements



The NSW Cadastre is a digital cadastral map, displaying property boundaries and a depth of property attribute information. Cadastral maps are used for a vast range of community, business and government activities, including everything from land management to electoral boundaries and bush fire control.



A major systems re-engineering project to improve maintenance and delivery functions for the NSW Cadastre and Topography databases is nearing completion.

Re-engineering has included an upgrade of:

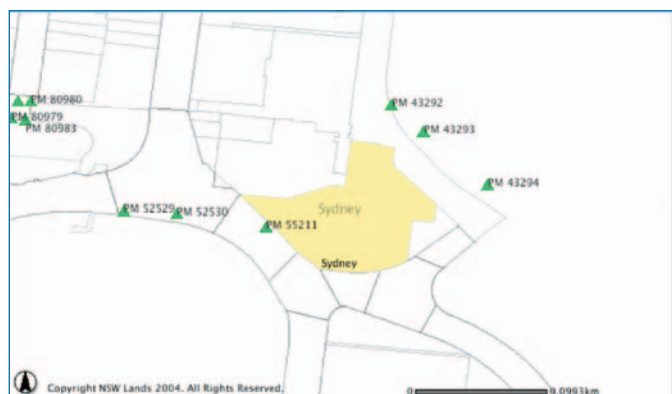
- Land parcel attribution and classification;
- Data models for cadastre, roads and topography;
- New delivery arrangements to support incremental updates; and
- 'On-demand' or 'set-and-forget' update and upgrade data arrangements for customers.

To support migration of the cadastre to the new environment, maintenance was suspended in July 2004. From late 2004, capture of new subdivision information is proceeding in the new maintenance environment. LPI commenced the posting of cadastral data updates to the new cadastral database during December 2004. The maintenance backlog arising from the migration is scheduled to be eliminated by the end of the first quarter, 2005.

Milestones:

- NSW Cadastral and Topographic data is available online through a browser interface at Lands Geospatial Portal at www.maps.nsw.gov.au;
- Cadastral and topographic Web Map Services (WMS) are available via www.maps.nsw.gov.au;
- Baseline supplies from the new delivery environment to NSW cadastre clients are scheduled to begin in early 2005;
- Client access to update and upgrade data through email, FTP and HTTP transfer is scheduled to become available from March 2005; and
- Maintenance backlog is scheduled to be eliminated by the end of the first quarter, 2005.

NSW Cadastre - development of common cadastral boundaries



LPI and Sydney Water have entered into an Memorandum of Understanding (MOU) for development of a single, authoritative cadastral dataset in the forty-six local government areas serviced by Sydney Water.

The project will deliver a single cadastral fabric by aligning the LPI cadastre to the Sydney Water cadastre to ensure asset relativity may be efficiently maintained. In addition, a 'proposed' or 'development' cadastral layer will be implemented for sub-divisions and developments not yet registered.

A thorough working trial is proceeding throughout 2005 involving both agencies. Continuing the cadastral program into 2006, LPI intends to prioritise further areas of the state for development of a single land cadastre between councils, utilities and LPI.

Milestones:

- LPI and Sydney Water entered into a MOU to proceed with development of a single land cadastre in mid-2004;
- The working trial, including maintaining positional relativity of Sydney Water's water and sewer services, is continuing through to September 2005; and
- Implementation of the single land cadastre is scheduled for completion by December 2005.

Road Centrelines - fundamental dataset improvement



LPI maintains a comprehensive statewide digital topographic data base (DTDB) that comprises three core themes; drainage, contour and cultural data. The cultural theme contains fundamental transport elements including road centrelines that are required to support industry and whole-of-government addressing and routing applications.

In order to bring the NSW road centrelines into currency, a Topographic Road Centreline (T-RCL) Project has been established to accelerate the creation of a complete and

current road centreline dataset. The project aims to create a seamless and topologically structured T-RCL dataset comprised of linear road, railway and airport facilities. Of significant importance is the timely integration of fire trail information held by State Forests, National Parks and the Crown Estate, into the topographic roads dataset, predominantly for Rural Fire Services applications.

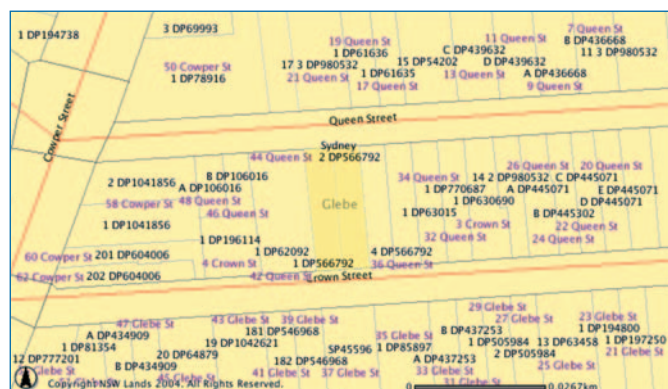
The T-RCL will be maintained on a state-wide basis utilising all available data sources including the Geographical Names Register, Cadastral Road Centrelines (C-RCL), addressing initiatives, imagery, and data/information exchange relationships with participating stakeholders.

Although considerable quality assurance processes are yet to be undertaken, LPI anticipates that the line work for fire trails and all named roads will be captured by end of first quarter 2005.

Milestones:

- LPI project team appointed January 2005;
- Line work for all named NSW roads (and fire trails) captured by end March 2005; and
- Road and fire-trail validation program with NSW government agencies by September 2005.

Geocoded Street Addresses - dataset improvement



LPI's customer research indicates the importance of developing a definitive geocoded street address dataset for NSW. Authoritative geocoded street address data offers benefits including more effective delivery of goods and services to consumers, elimination of duplication of address databases, and improved access for organisations requiring address data for their operations. The dataset allows links to be made between residential information, property attribute data and other geocoded data, and will enhance the ability of emergency services to respond

efficiently during times of crisis such as bushfires and floods.

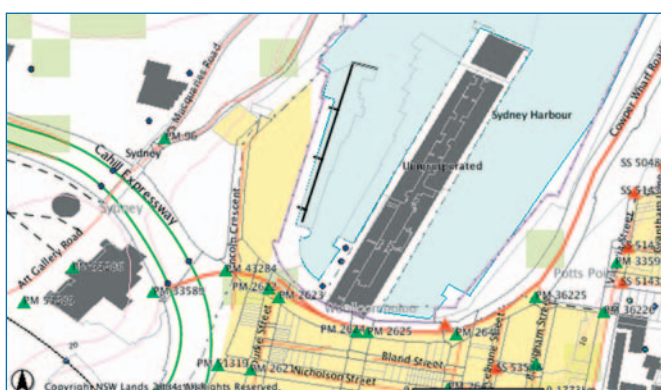
The Geocoded Urban and Rural Addressing System (GURAS) is a capital project that aims to complete data capture and implement efficient systemic maintenance for the definitive NSW geocoded street address dataset.

Maintenance of a complete, current NSW address database requires timely access to newly assigned addresses, completion of rural addressing throughout NSW, and data improvement for address content derived from various sources. The GURAS project is targeted to deliver significant improvements to fundamental NSW address data during 2005-06.

Milestones:

- GURAS data model consultation with stakeholder agencies completed December 2004;
- Initial population of GURAS address database to be completed by March 2005;
- The Rural Addressing Acceleration Program to be completed with 24 rural councils by end of June 2005;
- A further 24 Rural councils sponsored to complete the Rural Addressing Acceleration Program during 2005-06; and
- GURAS pilot program for online address data maintenance arrangements with seven Councils to commence from May 2005.

Topography - implementation of theme-based maintenance



In development since 2001, LPI's Spatial Maintenance Systems (SMS) project is delivering a generational upgrade in data maintenance and delivery arrangements for cadastral and topographic data, and is nearing completion.

NSW topographic data has been under maintenance in the SMS environment since mid-2004, and benchmark data supplies, incremental update facilities and other enhancements are being made available to clients in stages during 2005.

Following migration late in 2004, NSW cadastral data is now maintained in the SMS environment, with benchmark data supplies, incremental update facilities and other enhancements scheduled for implementation during 2005-06.

The improved system maintenance capabilities support LPI's introduction of theme-based maintenance, with programs for roads, addresses, hydrography, points of interest, and other features.

Milestones:

- Capture of roads and fire-trails scheduled to be completed March 2005; and
- Data improvement to points-of-interest, and drainage and hydrography data themes scheduled during 2005-06.

Further Information

For further information on LPI's spatial data improvement programs, please contact:

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