

JoGIS NEWS

CORPORATE GIS

"Keeping you spatially updated!"

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- **New set of ArcStorm data available**

A consolidated cadastral dataset of the City of Johannesburg is now available in the new co-ordinate system (WGS84). It includes Midrand, Modderfontein, Roodepoort, Sandton, Soweto, "Old Johannesburg" and the Deep South. Although this first version (30 June 2002) still contains some gaps, it is the start of an ongoing maintenance and editing process. The next version should be available towards the end of the year. The new dataset can be obtained from Chris Wray (tel. 407-6120) and comments are invited from GIS clients (chrisw@joburg.org.za).

- **Corporate GIS websites**

Corporate GIS has established a number of websites for Council employees to view the Council's GIS and cadastral information on their own desktop PC. Employees may use an Internet browser (such as Window's Explorer or Netscape) to log onto these websites and view or zoom to an area of interest or make an A4 or A3 print. The sites can also be used to help with public queries. A wide range of geographical data and imagery is accessible such as: the Cities Revealed (1997) and the new Joburg2000 aerial photography, contours, Unicity region, ward and voting district boundaries, cadastral data, road centre lines, topographical data, etc.

Five websites have been established each catering for different scales or specific projects.

General information for the entire City of Johannesburg is provided by two websites:

- **unicity** (<http://cgisims/website/unicity>), which is freely available to anyone who has access to the Council Intranet, but will not be updated.
- **unicity2000** (<http://cgisims/website/unicity2000>), which contains the latest photography and updated cadastral information, is password protected and can only be accessed once an agreement has been signed with Corporate GIS. Two additional layers have

been added to the Unicity2000 website, namely Township(AS) and Stands(AS) while some label changes have been made to the aerial photography.

More specific websites were established as part of the Alex renewal project and are extremely useful for anyone interested in the upgrading of Alexandra and neighbouring areas. They are:

- **Alexandra** (<http://cgisims/website/Alexandra>); and
- **Alexemf** (<http://cgisims/website/alexemf>), which stands for Alex Environmental Management Framework.

Another useful website developed for the Housing Department and Inner City Housing Upgrading Trust site is:

- **ichut** (<http://cgisims/website/ichut>), which focuses on upgrading buildings in the Johannesburg CBD.

These websites are only available to users with access to the Council’s Intranet, i.e. Council employees, Utilities, Agencies or Corporatised Entities. However, within the next year, the Unicity2000 website will be made available on the Internet to allow the private sector and general public access to Corporate GIS datasets.

● **New 26-digit code for Corporate GIS cadastral data**

Corporate GIS is in the process of introducing a new 26-digit code for all cadastral parcels. The advantages of a standardized code are numerous, including:

- a single standard adopted by all Council Departments and UACs;
- easier integration of data from different departments; and
- ability to link to Surveyor General data.

The Corporate GIS Department (CGIS) has previously used a 17-digit code to describe cadastral data and a combination of the first 6 digits as a link to Township, Agricultural holding and Farm names. This code is described in Table 1 below.

Table1: Current CGIS 17 digit code

Ts_cd	054	Township Number	Allocated per Township, Agricultural Holding or Farm.
Ext_cd	001	Township Extension	Township Extension
Erf	00123	Parcel Number	Erf, Stand, Lot or Holding Numbers. Farm Numbers.
Ptn	0001	Portion Number	Sub-division or Farm Portion Numbers
Re	RE	Remainder	Remaining Extent of Parcel

With the integration of GIS data with Valuations, Billing and Planning Departments’ data, it has become necessary to adopt a new standard compliant with the national Surveyor General’s (SG) 21-digit code. However this code, depicted in Table 2, has a few shortcomings:

- no provision for recording Township Extensions
- no provision for recording a Remainder of a portion

- no link to the farm name through the Township number (current 17 digit CGIS code Ts_cd = 998 together with a unique Ext_cd to differentiate farms).

Table 2: SG 21-digit code

Sgo_cd	T	Office Indicator or Origin of Data	T=Pretoria C=Cape Town N=Pietermaritzburg F=Bloemfontein B=Bophuthatswana
Sgr_cd	0IR	Registration Division or Administrative District	
Ts_cd	0054	Township Number within Registration Division	Allocated per Township or Agricultural Holding. Inclusive of all Extensions. Farms are indicated by Code 0000
Erf	00000123	Parcel Number	Erf, Stand, Lot or Holding Numbers. Farm Numbers.
Ptn	00001	Portion Number	Sub-division or Farm Portion Numbers

Therefore after discussions with the Valuations, Billing and Planning departments of the City of Johannesburg, it was decided to modify the SG's 21-digit code to a 26-digit code. This new code alleviates all of the shortcomings described above by:

- including Township extension field (Ext_cd)
- including a Remainder field (Re)
- duplicating the Farm number in Ext_cd. The reason for this is that the combination of the first four fields of the new code will be used to describe Townships, Agricultural Boundaries and Farms, and will form the Townshipid field which will link to a list of Townships, Agricultural Boundaries and Farm names.

Tables 3 and 4 define the format of the new 26-digit code and provide an example of Townships and Agricultural Holdings, and Farms.

Table 3: New CGIS 26 digit code (Township Erf and Agricultural Holding)

T0IR00540010000012300001RE

Townshipid T0IR0054001

Sgo_cd	T	Office Indicator or Origin of Data	T=Pretoria
Sgr_cd	0IR	Registration Division or Administrative District	
Ts_cd	0054	Township Number within Registration Division	Allocated per Township or Agricultural Holding. Farms are indicated by Code 0000

Ext_cd	001	Township Extension	Township Extension
Erf	00000123	Parcel Number	Erf, Stand, Lot or Holding Numbers. Farm Numbers.
Ptn	00001	Portion Number	Sub-division or Farm Portion Numbers
Re	RE (Blank if no RE)	Remainder	Remaining Extent of Parcel

Table 4: New CGIS 26 digit code (Farms)

TOIR00003210000032100001RE
Townshpid TOIR0000321

Sgo_cd	T	Office Indicator or Origin of Data	T=Pretoria
Sgr_cd	0IR	Registration Division or Administrative District	
Ts_cd	0000	Township Number within Registration Division	Allocated per Township or Agricultural Holding. Farms are indicated by Code 0000
Ext_cd	321	Township Extension	Township Extension (In this case farm number in the Erf field is duplicated)
Erf	00000321	Parcel Number	Erf, Stand, Lot or Holding Numbers. Farm Numbers.
Ptn	00001	Portion Number	Sub-division or Farm Portion Numbers
Re	RE (Blank if no RE)	Remainder	Remaining Extent of Parcel

PLEASE COMMENT!

Corporate GIS realizes that a new code will have an impact on all its GIS clients and would therefore value the input from all UACs, as well as the Council departments. Comments are invited to reach John Floyd by 27 August 2002 at johnf@joburg.org.za or (011) 407-6196.

