

# THE JOGIS NEWS

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## FROM THE DIRECTOR

“The vision of Corporate GIS is to render the GIS as an indispensable decision-making tool that contributes directly to accomplishing the goals and objectives of the City of Johannesburg”, says Marcelle Hattingh, newly appointed Director: GIS.

Rather like money, spatial information can be used by every department, as virtually every local government function is linked to a spatial element. However, whereas money must be replenished as it is used, spatial information increases in value the more it is used and shared. Corporate GIS’s goal is to continuously ensure that accurate, relevant geographically referenced information is maintained and made available to as many clients as possible. This will ensure that GIS becomes an integral part of implementing the vision of the City.

GIS is in a continuous process of **adding data and new data sets** to provide a more comprehensive service to its clients. Extensive database **maintenance** and quality assurance procedures are being implemented for existing datasets. A special word of appreciation to those clients from COJ departments, COJ Regions, UACs as well as external clients who participate in extensive bi-annual customer surveys to determine data requirements and priorities.

One of the primary goals of the department is to **make spatial information available** to users on their desktops and to capacitate them to help themselves. Spatial information is now available to internal users via the Intranet as well as to external users via the Internet. CGIS’s ultimate aim is that members of the public will not have to travel to the Metro Centre, but will gain access through the Internet or at Council buildings. A specific campaign will be launched shortly for the possible involvement of the Region’s People Centres in this regard. This is to coincide with international GIS Day on 17 November 2004. Watch this space!



GIS Day is an annual global event where thousands of users of geographic information system (GIS) technology open their doors to businesses, schools and the general public to showcase real-world applications of this exciting technology.

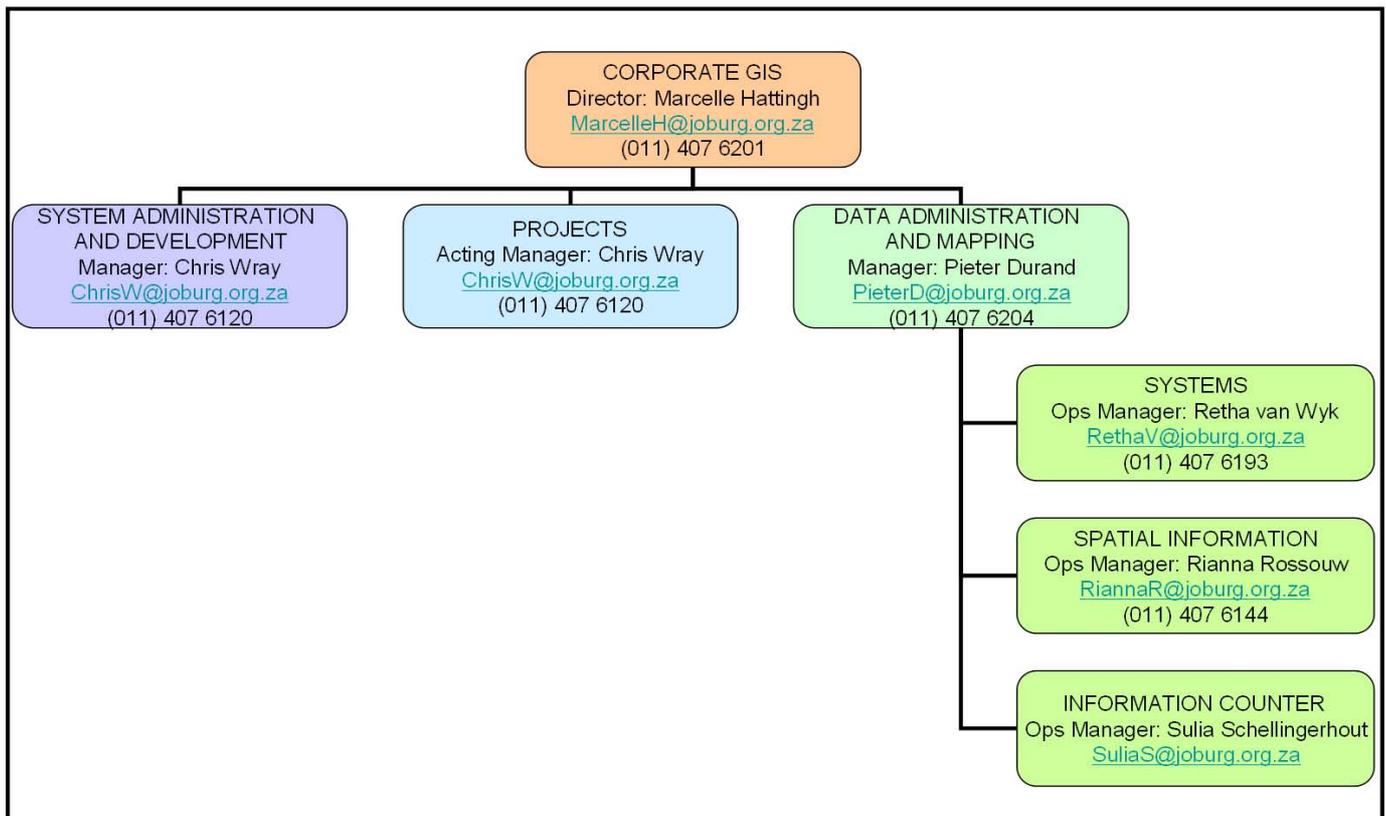
Creative ways of **packaging data** are continuously investigated to address the diverse needs of the clients. Read more about the map books on CD and interactive maps in this newsletter.

In conclusion, the Corporate GIS team is committed to deliver a better, customer focused service to its clients. In this regard, turnaround times and service ratings will continue to be monitored for all functions to ensure operational effectiveness and efficiency of the department and to maximize client and stakeholder satisfaction.

Any innovative ideas are always welcome and can be forwarded to [marcelleh@joburg.org.za](mailto:marcelleh@joburg.org.za).

## OVERVIEW OF SECTIONS WITHIN CORPORATE GIS

Corporate GIS consists of 3 main sections – these can be seen in the diagram below, with their respective managers.



## PROJECTS

The Projects Section attends to individual data and map-making requests to produce standard or customised maps. This service is available to internal as well as external clients. Map books per region at a scale of 1:5000 are now available and are particularly popular amongst clients such as estate agents who need a compact map in the car. Another product being developed is an Interactive map for those clients who require search, query and print capabilities of more detailed information, but do not have GIS software. These maps will also be available on CD. Some of the most recent projects are:

- Thematic mapping: population
- Capture of Proposed Townships
- Informal Settlements Demarcation
- Proposed Ward Boundary Changes
- Proposed Regional Boundary changes
- Updating of mapbooks on CD
- Revised Planning Zones
- Standard Map Products

## SYSTEM ADMINISTRATION AND DEVELOPMENT

The System Administration and Development Section (SAD) is responsible for the administration and development of the GIS. To meet ongoing staff and client demand for GIS data and services, SAD ensures that all GIS software, systems and databases are operational and running at maximum efficiency. The section also researches, develops and project manages new GIS software applications and data.

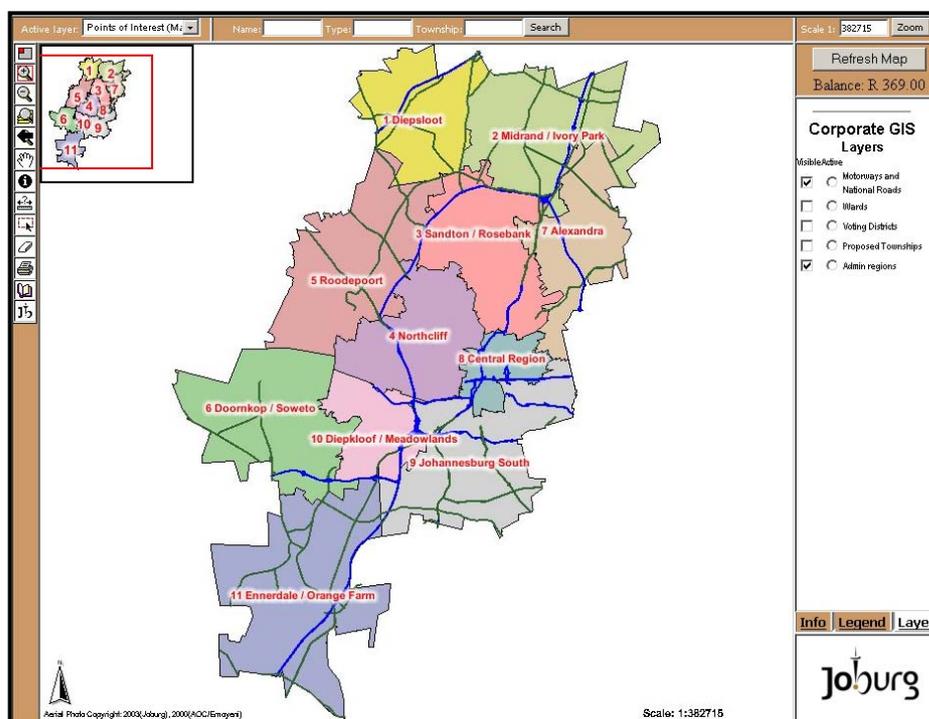
We are proud of our recent achievements which include:

- Joburg2003 aerial photography,
- Migration of the cadastral capture tool to Windows ,
- The Geodatabase environment, and
- The launch of the free and subscription Internet IMS online mapping sites.

New projects for 2004/2005 will mainly focus on enhancing the user friendliness and functionality available on the various IMS websites.

Any suggestions and/or requests for additional GIS functionality or services are always welcome.

SAD handles any problems related to the IMS as they arise. Each staff member, within SAD, is on support duty in turn to answer queries. Please contact our reception at (011) 407 6190 or send an e-mail to [ims@joburg.org.za](mailto:ims@joburg.org.za) if you have any problems or queries and your query will be forwarded to the relevant support staff member.



Initial page of the IMS Online Maps

## DATA ADMINISTRATION AND MAPPING

### SYSTEMS

On the zoning information project we can report that 423000 stands were captured by the end of September 2004 and that the existing amendment scheme documents were scanned as part of the project.

The scheme clauses for the 12 town planning schemes in operation are also available as scanned documents on CD to eliminate the printing cost of the individual documents.

The scanned A and B series Scheme maps on CD will continue to be updated and made available until the full data set is completed on GIS. For more information see the Johannesburg website at [www.joburg.org.za](http://www.joburg.org.za) or contact [rethav@joburg.org.za](mailto:rethav@joburg.org.za).

### SPATIAL INFORMATION

The cadastral updates are based on the General plans and diagrams received from Planning and the Deeds transfer data that is matched with the current GIS stands to identify the updates required. This process was implemented in June 2004 and the table indicates the percentage match achieved for each list.

FILES FROM DEEDS Date	NO OF RECORDS	% Matched
2004-6-26	741	78%
2004-7-14	5320	65%
2004-8-14	5596	67%
2004-8-26	2129	76%
2004-9-07	1138	72%
2004-9-17	1603	77%
2004-9-29	2409	79%

All the stands identified from the mismatch are captured on GIS as part of the updating process and also fed through to the Billing System. This will be an ongoing process that will ensure a ever increasing match percentage with an ultimate goal of 100%.

### INFORMATION COUNTER

The public information counter assisted a record number of clients in July and September numbering 2766 and 2752 respectively.

An electronic queuing system was also implemented in June. The system generates numbers for clients on arrival to ensure orderly queuing and generates statistics for turnaround times automatically from the user input.

The counter space will be increased from 1<sup>st</sup> November and will enable us to have separate services for short queries such as street and stand number verifications. This facility will reduce the time spent by clients in the queue.

The fax information service has increased its client base from 315 in June to 373 and is still growing on a monthly basis.

The September deadline for the submission of property values for value added tax calculations added a high volume of queries to the already busy service.

## INTERNET MAPPING

### NEW CARTOGRAPHIC STAND AND TOWNSHIP LAYERS

New cartographic stands and township layers are to be made available on the IMS websites and will replace the existing Stands, Stands (new), Township and Township (new) layers.

The cartographic layers are derived from the coordinate stand and township layers (which are edited and maintained by the Cadastral Capturing Section, ensuring original capture accuracy) on a monthly basis by applying a transformation with a cluster tolerance of 30 cm to remove any slivers or overlaps within 30 cm. This creates more seamless

cartographic stand and township layers to be used for printing hardcopy maps and in the IMS websites, but because of the generalisation they may not be SG (Surveyor General) coordinate accurate. The new stands and township layers will contain all the latest townships, subdivisions and consolidations captured and display the stand area (in m<sup>2</sup>).

The layers will also reflect whether a stand/township is Registered (at the Deed's office), SG Approved, Withdrawn, or has been assigned to History (replaced by another registered land parcel).

## NEW HELP FILE AVAILABLE FOR DOWNLOAD

A new help file has been developed for the IMS and is available for download from the e-services website. The help file starts off with a comparison between the free and subscription websites and then has a short description of the tools available on both sites. The user is then taken through registering on the e-Services Portal, to making an initial payment and then through to accessing the maps. Finally A brief description is given of how to manage basic searches on the map site with a few examples of the most common searches.

The help file can be downloaded from the e-Services page <http://eservices.joburg.org.za/joburg/eservices> by going to the "How do I?" tab at the top of the page, then clicking on the blue arrow next to "Online Maps", and then on 03 – IMS Help Manual (in PDF Format).

Adobe Acrobat Reader, version 5.0 or 6.0 is required to view .pdf files, and a link to the Adobe website is provided on the same page.

## IMS ONLINE MAPS TRAINING

Free training on IMS Online Maps is offered by Corporate GIS. For more information, or to book a place on the next available 1 hour training, please contact our reception at (011) 407 61290 or [ims@joburg.org.za](mailto:ims@joburg.org.za)

## STATISTICS

The City of Johannesburg has implemented various standards within the city that departments and staff are expected to meet and improve upon where possible. Various statistics are maintained within the department to ensure that these targets are measurable and assessable.

The current statistics by sections:

### Internet Mapping Site (IMS)

Number of Hits (internal to the server)		
July	August	September
34100	34847	37121
Server Query Response Time		
July	August	September
2.85s	4.89s	4.22s

### Projects

Number of requests		
July	August	September
89	79	67
New clients		
July	August	September
25	50	36
Product Type - Copies		
July	August	September
16	10	7
Product Type - Digital Maps		
July	August	September
11	26	8
Product Type - Printed Maps		
July	August	September
157	76	76
Product Type - Digital Data		
July	August	September
48	75	26