



Cape Urban Observatory

Report – July 2008 to July 2009

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1 Inception

The Cape Urban Observatory (CUO) is an applied urban research initiative of the African Centre for Cities (ACC). Work on the CUO began in July 2008 with the establishment of a coordinating group comprising Prof Susan Parnell and two co-directors, Dr Julian Smit and Dr Ralph Hamann. In addition, a CUO Forum was established with representatives of organisations with a direct stake or interest in the CUO's purpose and activities. Initially, these were the City of Cape Town, the Provincial Government of the Western Cape, the South African National Biodiversity Institute (SANBI), the South African Environmental Observation Network (SAEON), and the Council for Scientific and Industrial Research (CSIR). Subsequently, it was agreed that the Forum should include representatives from the other municipalities within the CUO's geographic scope, described below.

During the first few months of its establishment, numerous discussions within the coordinating group and the Forum were focused on developing the purpose, identity and organisational structure of the CUO. This also involved interviews conducted by the co-directors with the members of CUO Forum, which were meant to obtain a better understanding of these organisations' perspectives, interests and concerns related to the CUO. The outcomes of these interviews were discussed in a dedicated workshop with the Forum members. Box 1 provides a brief overview of some of the main points emerging from these discussions.

Box 1: Summary of key points emerging from interviews with CUO Forum members

The first overarching theme was that there was generally strong support among Forum members for the broad aims and objectives of the CUO. One respondent noted, "I am often frustrated by running around to find reliable, well-maintained data – I want to save others from this, and that can be an important benefit of the CUO". It was argued that there is an important role for the CUO as a forum for open and transparent communication, monitoring, learning and sharing (e.g. definition of joint data needs and sources). The CUO was seen as a potentially important external mediator between diverse interests. Furthermore, it was noted that the CUO can provide important benefits by focusing not just on the City of Cape Town but also on adjacent areas, thus alleviating some of the discrepancies between data availability and quality. The CUO should create an important link between monitoring, decision-making and analysis.

Discussions considered the key thematic areas that the CUO should focus on. It was generally agreed that the Integrated Development Plans (IDPs) provide an important set of thematic issues, with relevant categories including demographics, infrastructure and economic factors. A further point was that the CUO ought to contribute to a better understanding of the interface between social and natural systems. There was also agreement that the establishing a suitable focus would be a key challenge for the CUO, with the need for consolidating large existing indicator sets.

Another important challenge identified by Forum members was access to information. It was argued that significant data are available, but some data (especially secondary, manipulated data) may be proprietary. In such instances it may be possible to include moratoria on the conditions of using such

data. However, a more important challenge, it was argued, is likely to be lacking capacity in relevant organisations (time, money, skills, infrastructure). Finally, respondents noted that geospatial data and its analysis may be inappropriately understood or used, so there is likely to be a need for some kind of “health warning”.

The CUO’s overarching purpose was defined as contributing to the development of sustainable human settlements in the greater Cape Town area. This will be achieved by facilitating evidence-based decision-making and improved collaboration and learning by providing a public platform for the storage, dissemination and analysis of timely and reliable geo-spatial information and analysis on themes relevant to integrated development planning.

Discussions within the Forum gave rise to the definition of the geographic scope to include not only the City of Cape Town and the adjacent municipalities (Swartland, Drakenstein, Stellenbosch, Theewaterskloof and Overstrand), but also Saldanha Bay, based on the significant socio-economic linkages between that area and Cape Town. This area is outlined in Figure 1. Furthermore, it was agreed that the geographic scope is not rigidly defined by administrative boundaries, but will adapt to the relevant thematic issues.

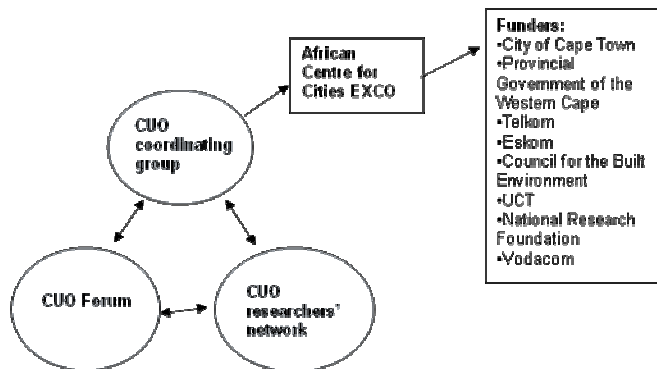
Figure 1: Geographic scope of the CUO



The organisational structure of the CUO is represented in Figure 2. It includes the coordinating group, which provides day-to-day operational management. More specifically, its role is to develop the thematic content of the CUO (including the participatory identification of relevant indicators); the procurement and management of relevant data; the development of suitable technological and GIS solutions; and the creation of the CUO’s organisational features, based on dialogue and

collaboration. The second pillar of the CUO is the Forum, which provides overarching strategic direction and guidance. (It was agreed by members of the Forum that its role should not be direct decision-making.) Regular meetings would ensure that the Forum is closely involved in the development of the CUO. The third pillar of the CUO is network of researchers at UCT and other research organisations, including also a team of postgraduate researchers within the CUO.

Figure 2: Organisational structure of the CUO



Establishing this organisational structure also involved the development of a database of relevant contacts, which is being updated continuously. Communication with these various contacts on matters related to the CUO was facilitated by the preparation of a brochure outlining its purpose and organisational structure.

2 Interviews, survey and inception workshop

Subsequent to these initial activities, the following three work streams were planned and implemented: 1) A series of interviews with suitable representatives of municipalities adjacent to the City of Cape Town; 2) The administration of an email-based survey of organisations in our contact database for the purpose of developing a data audit; 3) Budgeting and advertising for postgraduate students, including the establishment of a dedicated office; and 4) The planning and facilitation of a multi-stakeholder inception workshop.

Regarding the first of these, it was apparent that the CUO's links to the City of Cape Town were well established. Furthermore, as mentioned in Box 1, one of the CUO's contributions would be to expand the geographic scope to the adjacent municipalities. Hence it was agreed that some effort ought to be made to make contact with, to enrol and to obtain initial information from suitable representatives of these adjacent municipalities. To this end, Ralph Hamann conducted face to face interviews with representatives of Saldanha Bay, Swartland, Theewaterskloof and

Overstrand municipalities, as well as brief telephonic discussions with representatives of Drakenstein and Stellenbosch. These various discussions contributed to an understanding of the challenges and opportunities facing these municipalities, and they also helped organise the subsequent inception workshop.

The second work stream during these months in the second half of 2008 was to conduct a survey of data available among various relevant organisations. To this end, a short questionnaire was sent to organisations, but there was a disappointing response rate. A detailed response was received only from the City of Cape Town. Nevertheless, this also contributed to the continued development of the contact database and our understanding of what data is available and where.

The third objective was to develop a team of postgraduate researchers. This required discussions on a) the budget of the CUO as a whole, in order to identify the funds available for bursaries, b) the definition of themes, criteria and communication channels for the advertising and selection process and c) the development of a dedicated office space for these postgraduate researchers. The advertising process led to a positive response, with numerous applicants, yet the selection process was relatively straightforward based on our criteria of relevance of proposed research and candidates' academic background and strength. By the end of 2008, we had four confirmed bursary holders and two pending confirmation. Furthermore, a suitable room was identified and this has now been furnished with desks, chairs, computers and related requirements for at least six workspaces.

The fourth and final objective of the second half of 2008 was to prepare and facilitate an inception workshop. Invited participants were identified in our contact database and invited via email. The workshop was held at UCT on 28 November 2008. Participation was very encouraging and despite efforts to keep the workshop small and despite a move to a larger room, we were oversubscribed. Box 2 provides a brief summary of the workshop discussions.

Box 2: Summary of discussions at the inception workshop (based on a report written by Warren Smit)

The inception workshop was an opportunity for a range of stakeholders to be involved in the detailed conceptualisation of the CUO. The workshop was attended by more than 40 participants, including representatives of the City of Cape Town and surrounding municipalities, various departments of the Provincial Government of the Western Cape, the Gauteng Provincial Government, the CSIR, the Development Bank of Southern Africa (DBSA) and the South African Cities Network (SACN).

There were presentations from representatives of some of the government institutions which are partnering the CUO (Rika van Rensburg of the Provincial Government of the Western Cape, Craig Haskins of the City of Cape Town and Marius Meiring of Saldanha Bay Municipality) on their varying contexts, informational needs and current data collection and management initiatives. A representative of the Premier's Office in the Provincial Government also noted that they are

developing an integrated geospatial database for the province (which will have data layers to suit the main needs of the various departments). The workshop also had presentations by various institutions that have established various types of integrated databases: SAEON, SANBI, CSIR and the Sustainability Institute. Dr Kevin Winter (Environmental and Geographic Science, UCT) gave a presentation on his use of GIS in engaging with water and sanitation issues.

From the presentations, it was apparent that there is a substantial amount of data available, but it exists within many different institutions (or sometimes within different departments in the same institution) and is often not known about or easily accessed. It was also apparent that there are a lot of competing geospatial data platforms in South Africa (although, as one participant noted, it is often the same out-of-date and unreliable data that is continuously being recycled). Another point of concern is that a significant number of data sets are not publically available, as they were developed for particular clients, and are either confidential or are only available at a substantial cost.

There have been a number of attempts to link up separate databases, for example, the GIS section of the City of Cape Town serves as a central clearing house for the various GIS databases in the City, and there is the current Premier's office initiative to centralise GIS data in the Western Cape Provincial Government. There are also attempts to establish common protocols and standards for data, which will facilitate the linking up of different databases. The issue of metadata (data about data) was identified as crucial. The uneven GIS capacity of municipalities also emerged as a major issue.

From discussion at the workshop it was clear that there is an undoubted need for an Urban Observatory for the region, to link up, integrate and facilitate access to various databases held within various institutions within specific sectors or for specific geographic areas. The CUO could build on various regional initiatives aimed at linking different, and could perhaps identify and fill gaps where necessary. By bringing key stakeholders together and by linking up with academic researchers, the CUO could help develop strategic indicators and help facilitate better analysis of dynamics and trends in the region.

It is clear, however, that there are a number of challenges. Firstly, the University of Cape Town currently lacks the capacity to host the proposed internet-linked GIS system for the region, which will need to be hosted elsewhere (although it is not yet clear to what extent existing databases will need to be mirrored or merely linked to). Secondly, it will be a challenge to make the CUO useful to municipalities' IDP processes in a context where the City of Cape Town has a vast amount of geospatial data for its municipal area and high levels of capacity while some of the smaller municipalities may currently even lack capacity make use of such data. Thirdly, as noted by one of the participants, much of the raw data will still be problematic (but as noted by another participant, all data sets have their limitations and one has to work with the "best available" data).

Three working groups were formed to undertake further work before reporting back to the forum. One working group will look at the institutional process for taking the CUO forward, one working group will look at technical issues (such as the hosting of the CUO site) and one working group will look at key indicators. It was proposed that the indicators of the Global City Indicators Programme and the indicators being developed for SACN's State of Cities reporting process be looked at as models, and that, in the short term, data layers for a few of these indicators should be developed (and more indicators, and their corresponding data layers, could then subsequently be added).

It is clear that the inception workshop was an important event not only for providing the CUO with information and mandate, but also for establishing the CUO as a legitimate and important initiative in diverse role-players' perspectives. Building on

the momentum of the workshop has been an important objective during the first few months of 2009.

However, in early 2009 the CUO, among many others, were set back by the tragic death of Craig Haskins, the City of Cape Town's representative on the CUO Forum and an important champion of the objectives of the CUO. It will be impossible to replace Craig Haskins, but efforts needed to be made to build renewed linkages with the City. This was also facilitated by the CUO hosting a panel discussion at the municipal offices of the City ('Civic Centre') as part of the UN Habitat SUD-Net workshop at the ACC. These discussions provided further opportunity to present and consider the objectives and planned methods of the CUO, and by all accounts it was considered useful by workshop participants and the co-hosts at the City itself.

These early months in 2009 have also been spent helping the graduate students develop their research proposals and making necessary administrative and logistical arrangements. At this point in time six CUO bursary holders have taken their position in the dedicated office and are well on their way in developing their research proposals, linked to the broader objectives of the CUO. Box 3 lists the tentative research topics of the bursary holders.

Box 3: CUO bursary holders' research activities

Ayşe Basbozkurt (PhD; supervisor: Julian Smit) is currently in the process of finalising her registration and will be investigating methods of determining settlement densities from imagery using remote sensing and GIS technologies. The aim is to produce settlement density maps that can be used as an input to further multi-factorial analysis, such as those proposed by the "Cape Flows" projects.

Ratidzo Dhlembeu (MSc; supervisor: Ralph Hamann) embarked on a project with the title 'Service provision in Cape Town: Accounting for local community contexts'. However, she is currently changing her focus to investigate the use of GIS in mapping drainage systems in the greater Cape Town functional region. In particular, she is investigating the adaptation of an integrated catchment modelling system (BASINS) for use in one or more Cape Town river systems.

Justin Gichobi (PhD; supervisor: Julian Smit) is in the process of developing a land cover and land use classification scheme for Sub-Saharan African Cities. Once developed (during the course of 2009), he will be investigating hybrid methods of classifying remotely sensed imagery to produce relevant land cover and land use maps. Similar work currently being undertaken at a national level by the South African Department of Land Affairs, Chief Directorate: Surveys & Mapping will assist in the methodology of this research and may well provide research guidance and synergies.

Prestige Makanga (MSc; supervisor: Julian Smit) is investigating suitable network architecture for Geo-Portal systems design. Having only recently received the tools on which to build the CUO Geo-Portal framework prototype, it is expected that he will make substantial progress with the implementation of the CUO Geo-Portal in the coming months. He will be visiting the Stockholm Resilience Centre from the 8th – 13th of June in order to learn from their web-GIS experiences, and will visit Simon Fraser University of Vancouver between September – December this year to work on their

Urban Observatory project (this is sponsored by the UCT Semester Abroad programme). From the 15th – 19th of June, Prestige will attend the Geo-Spatial Data Infrastructure, GSDI 11 conference in Rotterdam, as the co-author of an academic paper.

Ruth Massey (PhD; supervisor: Ralph Hamann) is finalising a proposal on the application and expansion of the sustainable livelihoods model for vulnerability mapping in the Cape Town Functional Region.

Rebecca Tyler (MSc; supervisor: Julian Smit) registered for her MSc studies and will be focussing her research on community-based participatory GIS to assist in disaster mitigation and service delivery in informal settlement regions. The case study will be based in Masiphumelele in the Cape Town South Peninsula.

Other postgraduate students with research activities relevant to CUO:

Abigail Thebethe (PhD; supervisor: Julian Smit) is the current Director of the Directorate: National Spatial Information Framework (Department of Land Affairs) and is in the process of registering for PhD studies. Her research will focus on the development of a strategy to effectively use the South African core spatial datasets in the implementation of priority policy issues of government in South Africa. She forms a valuable contact with national spatial data infrastructure initiatives and brings relevant strategy and policy experience to the CUO. Abigail will be a part-time student who will not be based at UCT.

Jongikaya George (MSc; supervisor: Julian Smit) registered as an MSc part-time student. He works for the Directorate: National Spatial Information Framework (Department of Land Affairs) and will not be based at UCT. His research involves efforts and activities to make data accessible through the development of a national geospatial data clearing house. The experiences gained from this research will compliment that being undertaken by Prestige.

3 Work on indicators

A further objective during the early stages of 2009 has been to develop a better understanding of sustainability indicators, which of course is a topic that has received significant attention. To this end, a comprehensive literature review was undertaken. In the first instance, this was prepared for the Development Bank of Southern Africa (DBSA) for its Sustainable Communities Programme, but extra effort and time was put into this because of its direct relevance to the CUO. The draft report will provide a useful point of departure for ensuing discussions on the thematic focus and methodological approach of the CUO.

The mutually beneficial relationship between the DBSA programme and the CUO is set to continue, in that we are planning to use work on developing a monitoring system for one of the DBSA pilot projects in Grabouw (in the Theewaterskloof municipality) as a concurrent focus of the CUO. Hence three of the CUO graduate students will be using the Grabouw experience as one of their case studies and this will also feed into the broader CUO approach.

The work on indicators is also linked to the national level, with emphasis on discussions within the South African Cities Network, and the international level, in particular the Global Cities Indicators Initiative. Discussions with the latter group (based in Toronto) are currently focused on organising a workshop with key role-players to discuss thematic and methodological issues of the CUO, as well as the possibility of some kind of affiliation to this international network.

4 Progress on Geo-Portal development

Initial quotations for a Microsoft Windows Server 2008 platform, running Microsoft SQL Server 2008 (with spatial data storage embedded), have been received from ICTS. This Geo-Database system design will allow for sufficient redundancy in the file storage structure to minimise the impact (and allow for full recovery in most instances) of any server hard disc-drive failure.

Final system architecture design has been completed and final quotations on hardware, software and system support are expected within the next week. A 2-tier system structure is proposed, splitting Spatial Database (running on the CUO server) and Web Mapping Services (running on the Geomatics Division server).

The final purchase of the CUO spatial database server should fall within the budgeted figure of R60,000. It is also envisaged that the CUO Geo-Portal web site will be run off this server.

A meeting was held with the CEO of GIMS, Mr Patrick McKivergan in April to secure the supplied the ESRI GeoPortal Toolkit v9.3 which will allow for the development of a spatial meta-data catalogue, using an ESRI ArcGIS 9.3 Server and Desktop platform. This should allow for maximum integration with the City of Cape Town GIS data structures as they are built on ESRI technology. In addition, we have also been supplied with Voyager GIS, a GIS tool allowing you to instantly find map documents, datasets, web mapping services and other geospatial resources on your desktop or across the enterprise. This will prove useful in populating the spatial data clearing house.

ArcGIS Server v9.3 will for the time-being run on the Geomatics Division application server and will be used to provide web-mapping services to the CUO Geoportal.

5 Web page development

It has been decided that the web pages containing an overview of CUO activities and the CUO Geo-Portal will be separated in the current design. The CUO overview and information pages will be contained within the web structure of the ACC.

The web pages relating to the Geo-Portal will be maintained on the CUO Geo-Database server with a hyperlink between the CUO overview/information and Geo-Portal web sites. To the user, the different locations of web content will be transparent.

6 Institutional progress

Current discussions between the City of Cape Town and the Premier's Office (Western Cape Provincial Government) to establish a Memorandum of Understanding governing spatial data sharing are still underway. These negotiations aim to facilitate formal relations between the two organisations, reducing the reliance on personal relationships and providing a clear data sharing framework. This is an ongoing item that will be monitored, as it may prove to have a significant impact on clearing the path to Provincial level data access.

Discussions between the CUO and ICTS have been conducted to establish policies regarding the hosting of the CUO Geo-Database server on the UCT network. Although in principle there are no impediments to this, there are practical implementation and support issues that need to be resolved. These relate to the physical location of the server in the UCT network and the provision of maintenance support by ICTS. The ICTS network "team" are currently compiling a proposal for consideration in this regard. Finalisation of these infrastructural issues should be resolved shortly. It is envisaged that the CUO spatial database server will reside in the Menzies building server room (5th floor, Menzies building) and be supported by ICTS and a 3rd party specialist server support company (primarily for hardware support).

7 Next steps and milestones

The most recent CUO Forum meeting was held 31 July 2009 and included representatives from the initial CUO Forum membership, as well as new members, including from Theewaterskloof and Stellenbosch municipalities. At this meeting, presentations were made and discussions held on the first year of the CUO operations, as well as intended next steps. All participants had opportunities to present on relevant developments in their organisations. Forum participants agreed that the general focus and past and intended activities of the CUO are in line with expectations. (See meeting minutes for details.)

Table 1 provides an outline of key activities and milestones for the CUO in the next few months. Many of these activities will be oriented towards creating effective links between the CUO and the following affiliated projects, which will also provide some thematic focus:

- *Healthy Cities*: This is an interdisciplinary research programme on the relationship between the urban environment and health in Cape Town. It includes the ACC CityLab, UCT Sports Science Institute, Cape Urban Observatory, UCT Health Sciences, Medical Research Council, Programme in Urban Food Security, and Children’s Institute;
- *Flooding*: This project aims to establish a collaborative governance system required for better decision making processes in the face of climate change risks in the City of Cape Town. It includes the ACC City Lab, IDRC (Climate Change Adaptation in Africa – funders), Cape Urban Observatory, MIT, City of Cape Town, UCT Centre of Criminology, Stockholm Environment Institute and Slum Dwellers International;
- *Ecosystems Services*: This is a group of researchers within the CUO that seeks to better understand and illustrate the significance of the flows of resources and energy within the Cape Town Functional Region. The group includes Ivan Turok (ACC), Henrik Erstson (Stockholm Resilience Centre) and the co-directors of the CUO;
- *Urban Atlas*: This is an initiative of Stockholm Resilience Centre to establish an international Urban Social-Ecological GeoPortal with biodiversity, ecosystems services, social and governance indicators. The CUO is planning to be one of 12 international site-based research groups around the world;
- *Indicator Framework*: As mentioned above, this work includes collaboration with the South African Cities Network and the Development Bank of South Africa;
- *Informal Settlements*: The CUO is aiming to be in close contact with current efforts of the Provincial Government of the Western Cape in establishing a Provincial Informal Settlement Database in support of an Informal Settlements Masterplan. This is being done in conjunction with the City of Cape Town, which, among other things, has a number of pilot projects for informal settlement upgrading.

Table 1: An outline of key activities and milestones for the CUO in the next few months

Activity	Milestone	Date	Responsibility
1) Expansion and reconstitution of the CUO Forum, including formal letters to new members	<ul style="list-style-type: none"> • Invitations sent to existing and new members • Forum meeting 	<p>Done</p> <p>Done (late July)</p>	Ralph Hamann
2) Communication with broader stakeholder community	<ul style="list-style-type: none"> • Update / newsletter (to be based on this report) to be sent to broader stakeholder group after Forum meeting 	August (to be done after ACC staff meeting in August)	Ralph Hamann
3) Development of thematic focus based on an indicator set	<ul style="list-style-type: none"> • Preparation of a report based on DBSA work in 	September	Ralph Hamann

	<p>Grabouw</p> <ul style="list-style-type: none"> Facilitation of a stakeholders workshop to discuss our indicator proposals 	October	
4) Installation of a dedicated server	<ul style="list-style-type: none"> Server to be in place 	September	Julian Smit
5) Development and publication of website	<ul style="list-style-type: none"> Logistical arrangements in place (hosting, etc) Content in place (info page) 	September September	Tau Tavengwa / Julian Smit Julian Smit (Ralph Hamann)
6) Collection of data from surrounding municipalities	<ul style="list-style-type: none"> Database of collected data 	October	Julian Smit
7) Development of the spatial data clearing house, including meta-data database (note that meta-data will cover all feasibly available data, not just those directly related to the indicators)	<ul style="list-style-type: none"> Spatial data clearing house available on public website 	October	Julian Smit to oversee contributions by postgrad students dedicated to particular municipalities: Justin Gichobi (Drakenstein) Ratidzo Dhlembeu (Swartland) Ruth Massey (Saldanha) Prestige Makanga TWK) Rebecca Tyler (Overstrand) Ayse Basbozkurt (Stellenbosch)
8) Development, cleaning and publication of spatial data layers to respond to key thematic areas	<ul style="list-style-type: none"> Ongoing 	Ongoing	Julian Smit to oversee Nick Lindenberg and postgrad students
9) Preparation and publication of policy briefs	<ul style="list-style-type: none"> Policy briefs on, e.g. spatial economy, land use / settlement changes, ecosystem services 	September	Ralph Hamann to liaise with, e.g., Ivan Turok, Owen Crankshaw, Jane Turpie, etc

8 Annex: Current financial report for the Cape Urban Observatory, March 2009

R4 500 000 over 3 years	2008	2009	2010	
Correspondent:	1,500,000	1,500,000	1,500,000	4,500,000
Signed:				

Citylab

Project Manager: Prof Susan Parnell, Ralph Hamann, Julian Smit

Proposed & Approved Budget Description	Budget				Income & Expense Reporting - 2008		Income & Expense Reporting - 2009	
	2008	2009	2010	x3years	Expenses	Variance	Expenses	Variance
Urban Observatory								
Cost of employment equivalent for Ralph Hamann (co-director)	208000	208000	208000	624000	208,000.00	-		
Teaching time equivalent for Julian Smit (co-director)		45000	45000	90000		-		
Cost of employment equivalent for one research assistant	92000	92000	92000	276000		92,000.00		
2 x Doctorate bursaries at 75,000pa (Gichobi)	150000	104000	104000	358000	37,500.00	112,500.00		
3 x Masters bursaries at 50,000pa (Makanga)	150000	150000	150000	450000	25,000.00	125,000.00		
Travel, incl presentation at one international conference by each of three researchers	80000	80000	80000	240000		80,000.00	16,031.22	
Event costs, especially linked to the mid-year workshop (including venue and catering)	50000	75000	75000	200000		50,000.00		
6 x computer @ R10000, incl server	60000	60000	60000	180000		60,000.00		
Miscellaneous start-up costs	25000	25000	25000	75000	8,390.43	16,609.57		
Marketing & Communications (brochures etc)	15000	15000	15000	45000		15,000.00		
Equipment (access, printer, furniture etc)	80000	56000	56000	192000	76,572.55	3,427.45	63,272.28	
Project Costs (Data audit), data costs, satellite imagery	90000	90000	90000	270000	720.00	89,280.00		
Total	1000000	1000000	1000000	3000000	356,182.98	643,817.02	79,303.50	0

2008**Urban Obs**

Initially Granted		1,000,000	
Expenses To Date		356,183	
Variance C/forward		643,817	
			643,817.02

2009**Urban
Obs**

Initially Granted			
Carried Forward from 2008		643,817	
Expenses To Date		79,304	
Variance		564,513.52	
			564,513.52

2009 Funds not granted yet