“Achieving the Vision”
Geo-statistical integration addressing South Africa’s Developmental Agenda

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Contents . . .

- Our experience. What has it thought us about geo-statistical integration?
- SA Spatial Data Infrastructure (SASDI)
- SA Developmental Agenda
- Spatial Analysis focus
- Concluding remarks
1996 Census laid the foundation for many things…

- **1st set of digital EAs for SA. 1st spatial set of places. SuperCross/ Map.**

- **4 Government Departments working collaboratively towards common goal (Stats SA, Rural Development, Independent Electoral Commission, Municipal Demarcation Board)**

- **Key fundamental principles**
  - Collaborative maintenance of fundamental geographic data sets
  - Geo-statistical building block
From census-centric to corporate-centric – Geography Division was established.

Maintain a Standard Geographic Frame.

Collaborative arrangements for spatial data.

• Dwelling points together with aerial & satellite photography basis for demarcation. Dwelling Frame updated from census listings.

• Maintain a Standard Geographic Frame.

• Collaborative arrangements for spatial data.

• Resurrection of the Committee of Spatial Information (CSI) & SASDI.

• First draft of SA’s National Development Plan was released.

• Team of 12 goes back to school “the CRUISE program” was established.
### Collaborative arrangements for spatial data...

<table>
<thead>
<tr>
<th>National Government Departments</th>
<th>Data sets</th>
<th>Period</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDNGI (Rural Development)</td>
<td>Imagery (2008-2011), topo sheets/vectors, place names</td>
<td>Imagery-2008-2011</td>
<td>Gov data exchange; R7.7 mil</td>
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<tr>
<td>Dept of Human Settlement</td>
<td>Informal Settlements, RDP housing</td>
<td>2010</td>
<td>Gov data exchange</td>
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<tr>
<td>Dept of Education</td>
<td>School points</td>
<td>2010</td>
<td>Gov data exchange</td>
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<tr>
<td>Dept of Health</td>
<td>Hospitals, clinics</td>
<td>2009</td>
<td>Gov data exchange</td>
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<tr>
<td>Dept of Rural Development: Surveyor General</td>
<td>National Cadastre</td>
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<tr>
<td>Dept of Rural Development: Spatial planning</td>
<td>Tribal Boundaries</td>
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<tr>
<td>Dept of Water Affairs</td>
<td>Villages (rural communities) and reservoirs</td>
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<tr>
<td>Dept Of Local Government and Traditional affairs - KZN (Current Cogta)</td>
<td>Tribal Boundaries, wards</td>
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<tr>
<td>MDB</td>
<td>Municipal Boundaries and Provincial boundary</td>
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<tr>
<td>IEC</td>
<td>Wards and Voting stations, data where voting takes place</td>
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<td>South African Police</td>
<td>Police Stations, police attributes (National - Excel format)</td>
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<tr>
<td>SanParks</td>
<td>Private nature reserves, national parks, provincial boundaries</td>
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<tr>
<td>Different Metros</td>
<td>Imagery and vector (zones, cadastre)</td>
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### Private Sector / Parastatal

<table>
<thead>
<tr>
<th>Data sets</th>
<th>Period</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provinces, Municipalities, District Councils, Magisterial Districts, Electoral Wards, Tribal Authorities, National Address Database, Cadastre, Deeds Data, Street Centrelines, Points of Interest, Suburb Boundaries, Town Boundaries, Postal Codes, Postal Code Regions, Sectional Schemes, Proclaimed Town Boundaries, Built Up Coverage, Gated Communities</td>
<td>2010 &amp; 2011</td>
<td>R. 500 000 for a three year maintainance cost.</td>
</tr>
<tr>
<td>AFRIGIS Spot (Spatial) Building Count points and polygon data</td>
<td>2009/2010</td>
<td>Data exchange collaboration in place</td>
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<tr>
<td>Eskom Geospace and other imagery service providers</td>
<td></td>
<td>Gov data exchange</td>
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<tr>
<td>Imagery</td>
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</table>
Collaborative arrangements for spatial data continues …
Our experience. What has stood the test of time? …

Standard Geographic Frame (consistent & stable over time)

Geo-statistical Building Block against which information can be collected & rolled up for dissemination

Updated & reliable fundamental sampling frames: Dwelling/ Address Frames; the Business Frame

Built a dependency on other data suppliers/ producers. We want quality data from them. Dependency on a functioning SASDI. Therefore statistics supports the SASDI development.
Resurrection of the Committee for Spatial Information; Establishment of SASDI …

- SDI Act was promulgated in 2003.

- **Main focus to establish South African Spatial Data Infrastructure (SASDI). Promoting Availability, Accessibility, Usability, Relevance, Reliability – for spatial information.**

- 1<sup>st</sup> meeting of Committee for Spatial Information (CSI) June 2010.

- CSI Sub-Committees established. Work of sub-committees began April 2011. Stats SA was assigned responsibility for the Data Sub-committee.

- Achievements: Defining core spatial data sets & the list of data custodians; define & develop the metadata catalogue; SASDI Website up and running although not a fully-fledged geo-portal as yet; policies, guidelines & procedures drafted.

- Busy with South African Geo-Information Management Strategy:
  - Embedding spatial data within the country’s Developmental Agenda. Giving it relevance. Promoting its usability.
  - Strategically locating the function of spatial data coordination; leadership
South Africa’s National Development Plan (NDP) - Vision 2030

- **Clear statement of Government priorities.**
- **Adopted by Cabinet every five years.**
- **Alignment of short-term, medium-term & long-term planning.**

**Case of INDONESIA**

- **Evidence-based. Spatial & Statistical information basis for planning, monitoring and evaluation – South Africa’s Developmental Agenda.**
CRUISE Programme …

- **Usability of data. The STORY about our country. Builds on our motto - The South Africa I know. The HOME I understand.**

- **Builds geo-spatial statistical thinking. Expands the depth & breadth of our information needs.**

- **1 year intensive Masters Programme. Produces journal articles, dealing with critical aspects of our developmental agenda using spatial and statistical data like transforming spatial distortions in settlement planning; the impact of corridor development; municipal service delivery, etc.**
In both 2006 and 2013, Cape Town and Tshwane completed the most number of buildings.
Municipal Capital Investment Framework & Spatial Development Frameworks

- Not all data used for planning is produced by Stats SA.
- Will involve collecting, standardizing, utilizing important information from other sources.
- Dependency on a functioning NSS.
Concluding remarks …

- **SASDI is not at a mature stage.** Still difficulties with cooperation, data integration & harmonization, funding and leadership.

- **Relevance with respect to SA Developmental Agenda for both the GEO & the STATISTICS** needs re-strategising to collect, structure & present for Government’s priorities.

- **Censuses, surveys or statistical data in general, requires geography,** the smaller (detail) the geography the better for planning. Statistics will benefit from a functioning SASDI & SASDI from statistics.

- **Geo-statistical integration important.** Stakeholders that collect statistics (like local municipalities, education, health, policing, and other sector Departments) must maintain the links with the smallest (lowest) geography – can be rolled up to place, ward, municipality, province or any other geography.

- **Geo-statistical building block against which we all can collect data.**

- **Successful implementation of the National Statistical System (NSS)(part of the Statistics Act) & SASDI is important for South Africa’s growth and development.**
Our experience. What has it taught us about geo-statistical integration?

SA Spatial Data Infrastructure (SASDI)

SA Developmental Agenda

SASDI - NSS

Evidence-based (Geo-Statistical) analysis that informs service delivery, growth & development

“most dramatic and visible expression of the efficacy of our democracy”

THE SOUTH AFRICA I KNOW, THE HOME I UNDERSTAND
Thank U

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