



How technology is driving performance to help create communities

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Housing Development Agency,
South Africa

Outline

1. Brief history of the HDA
2. The Challenge
3. Organisational buy-in
4. Improving operations to deliver
5. Demonstration
6. The impact of technology

1. Brief History of the HDA

Establishment

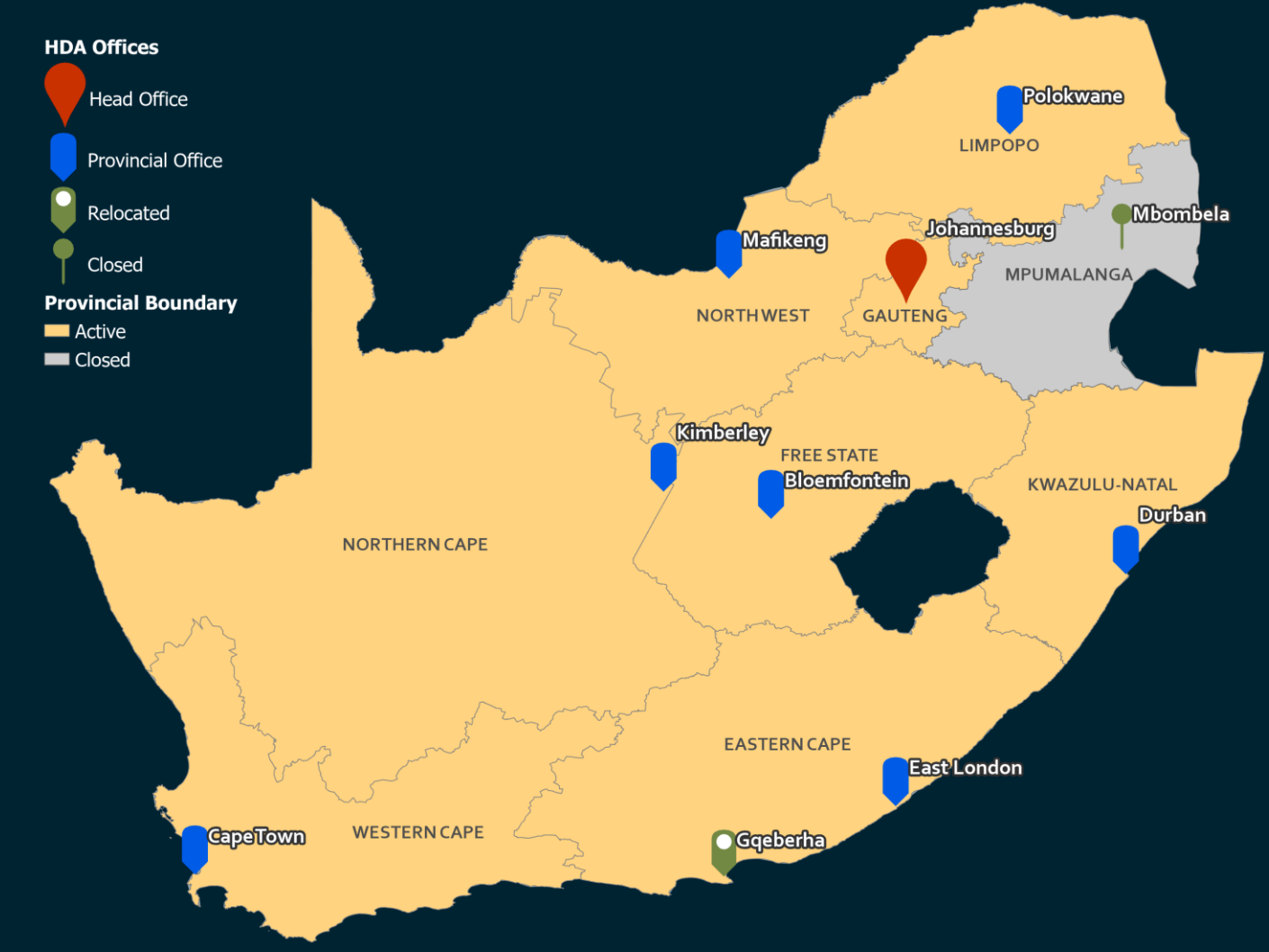
Housing Development Agency (HDA) was established in 2009 after the enactment of the **Housing Development Agency Act (No. 23 of 2008)** and has been operational since the 2009/2010 Financial Year. The primary objectives of the HDA is to:

- identify, acquire, hold, develop and release **well-located** land and buildings for human settlement development;
- Facilitate housing delivery and package and design projects for human settlements development.

Our vision is to provide integrated, sustainable human settlements and security of tenure.



Initial footprint focusing on the “land mandate”



Current footprint focusing on the “developer mandate”

2. The Challenge

The need for Digital Transformation in the human settlements sector

1. With the advent of the **4th Industrial Revolution (4IR)**, disruptive technologies has become a driving force behind business transformation.
2. The **Human Settlements sector** was no exception.
3. The **Minister** of Human Settlements challenged the sector to **use technology** efficiently, to deliver on its mission statement, "*to facilitate the creation of sustainable Human Settlements and improved quality of household life.*"

The role of the GIS unit to implement new technologies

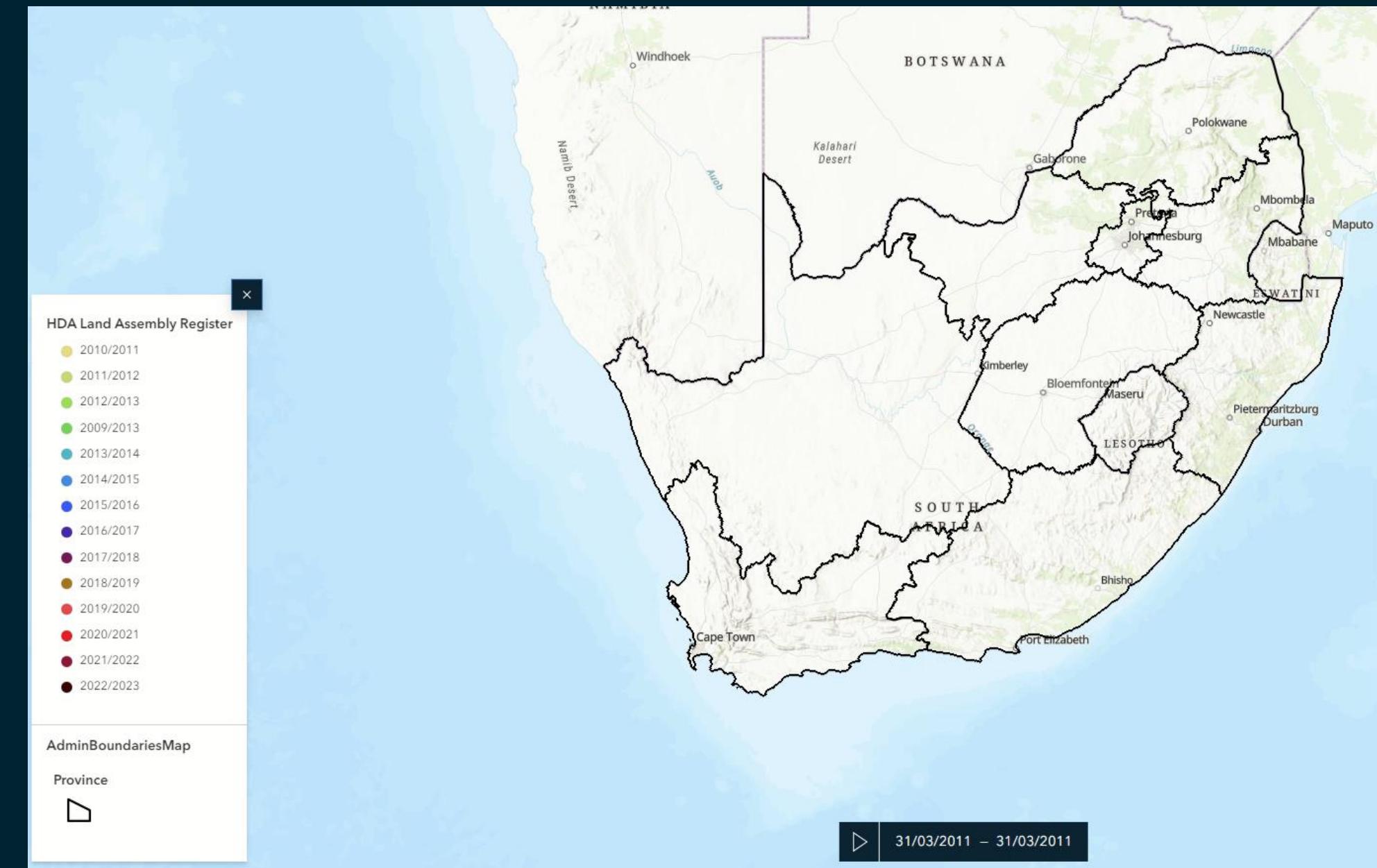
The **GIS unit** in the HDA has always been one of the units to use technology to **support decision-making**. The unit evolved significantly over time. Initially, the organisation was dependent on a service provider to provide geospatial services, to taking responsibility of:

- **mapping functions** (for land identification);
- **spatial analysis** (for spatial targeting); and
- **application development** to streamline business processes.

Land identification and property profiling

The unit identified over **900 000 ha** of land in all 9 provinces.

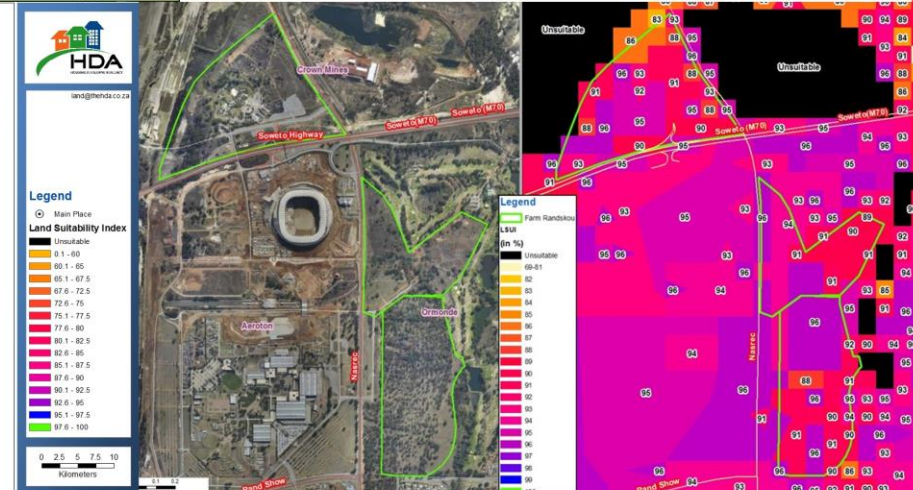
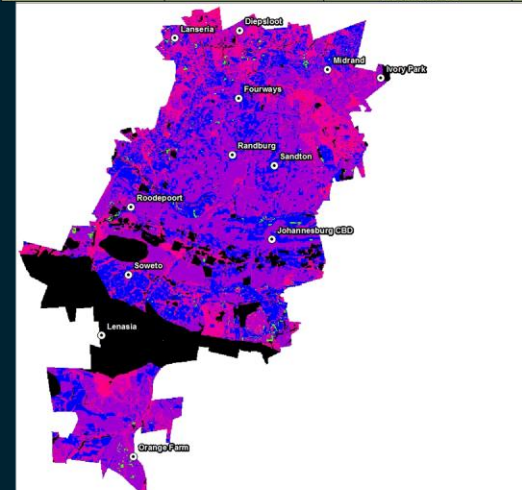
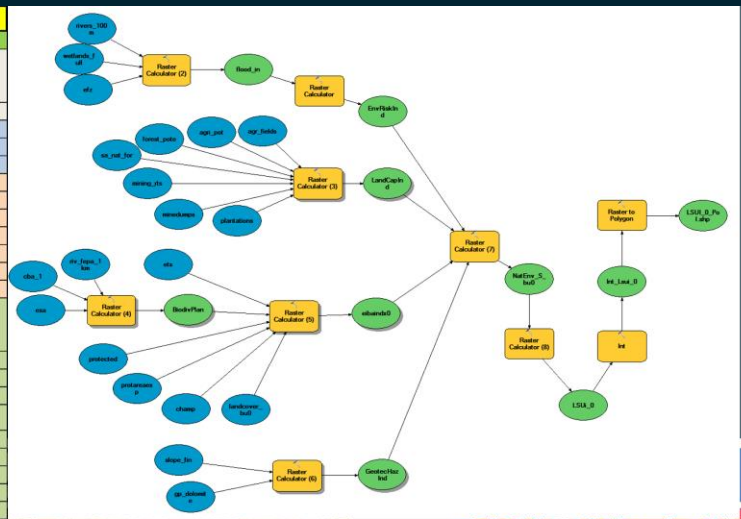
Property overview maps supplemented by infrastructure, ecological, geotechnical, land cover, social amenities and reports are submitted for **pre-feasibility** studies to determine whether land should be acquired, released and/or developed.



Spatial Analysis for Spatial Targeting

1. National Human Settlements Land Indices (NaHSLI) to determine well-located land

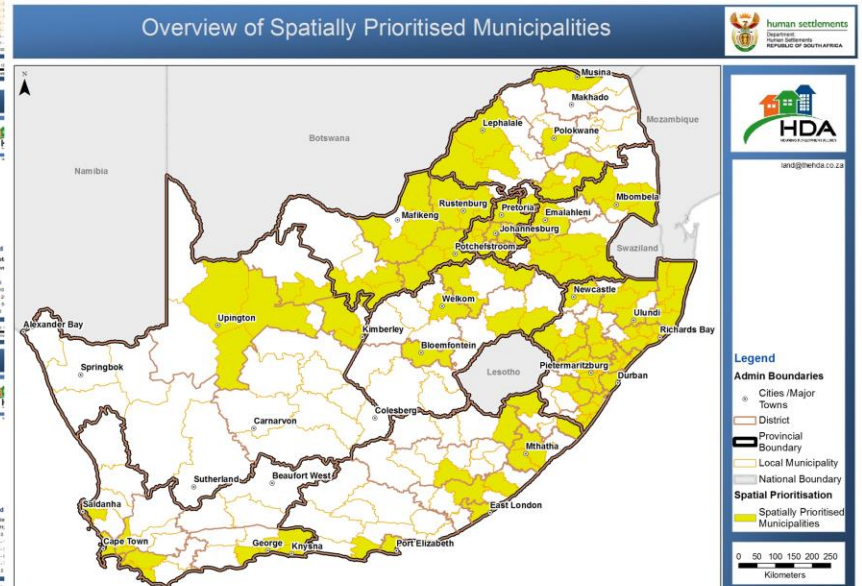
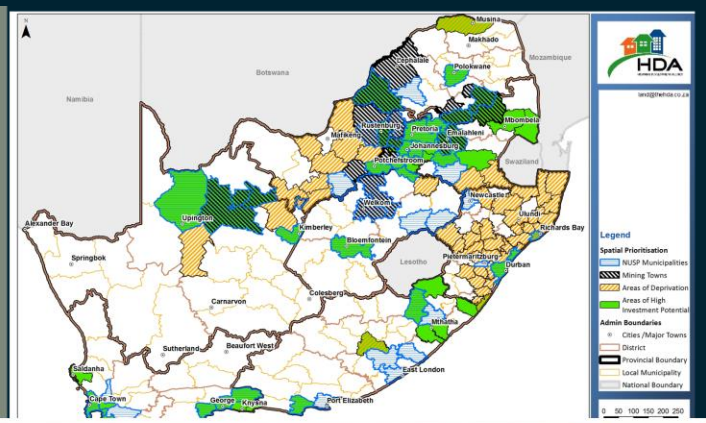
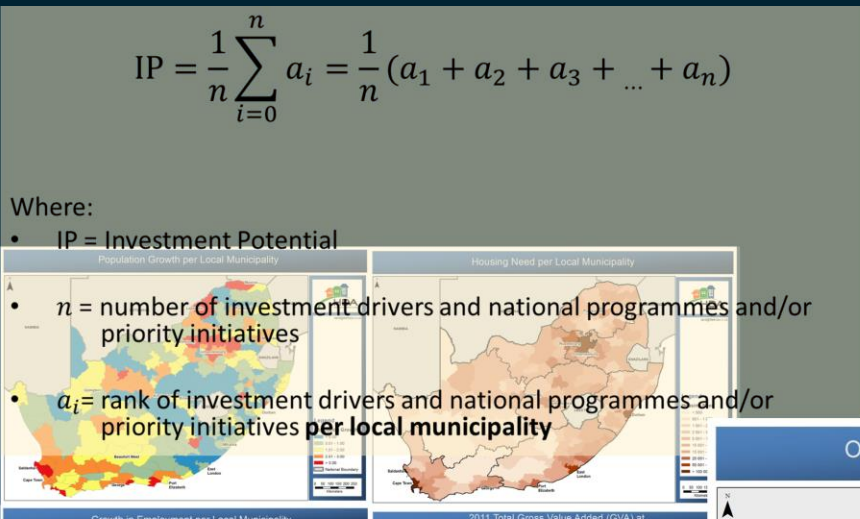
Land Suitability Index Weighting Model				
Index	Determinants	Indicators	Weight	
Geotechnical Hazard Index	Geotechnical conditions	Slope	Slope 0-12 degrees [1]; slope 12-18 degrees [0.7]; slope greater than 18 [-100]	
		Dolomite	-100	
Environmental Risk Index	Flood and Inundation risk	Rivers with 100m buffer	0.3	
		Wetlands with 100m buffer	0.3	
		Estuarine Functional Zone	0.4	
Land Capability Index	Forestry	Existing plantation	0.1	
		Afforestation potential	0.3	
	Agriculture	Natural forest	-100	
		Existing fields irrigation	0.1	
		Agriculture potential arable	0.1-0.5	
Mining	Mining rights	0.1		
	Mine Dumps	-100		
Ecological Infrastructure and Biodiversity Assets Index	Ecosystem threat status	Critically endangered [0.1]; Endangered [0.3]; Vulnerable [0.7]		
		Biodiversity Planning	Critical biodiversity areas	0.1
			Ecological support areas	0.4
	Protected areas	FEPa with 1KM buffer	0.3	
		Existing protected areas	-100	
	Habitat quality	Protected areas expansion	0.4	
		Champion tree with 50m buffer	-100	
		Natural	0.1	
		Degraded	0.7	
		Water bodies	-100	



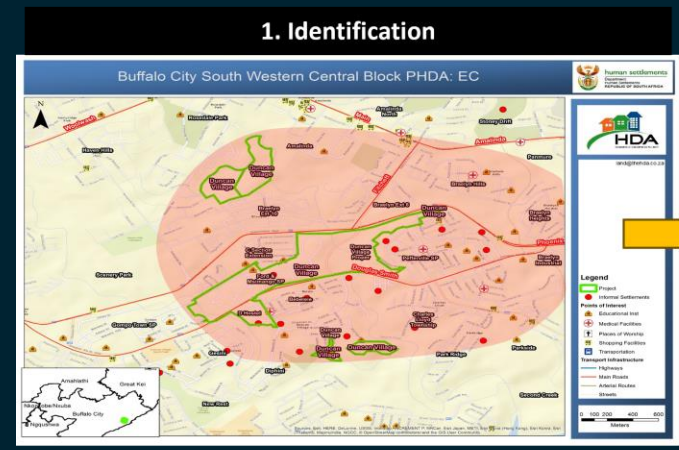
2. Human Settlements Master Spatial Plan (HSMSP) to target municipalities with the highest investment potential

$$IP = \frac{1}{n} \sum_{i=1}^n a_i = \frac{1}{n} (a_1 + a_2 + a_3 + \dots + a_n)$$

- Where:
- IP = Investment Potential
 - n = number of investment drivers and national programmes and/or priority initiatives
 - a_i = rank of investment drivers and national programmes and/or priority initiatives per local municipality



3. Priority Housing Development Areas (PHDAs) to target precincts to channel funding to communities in need

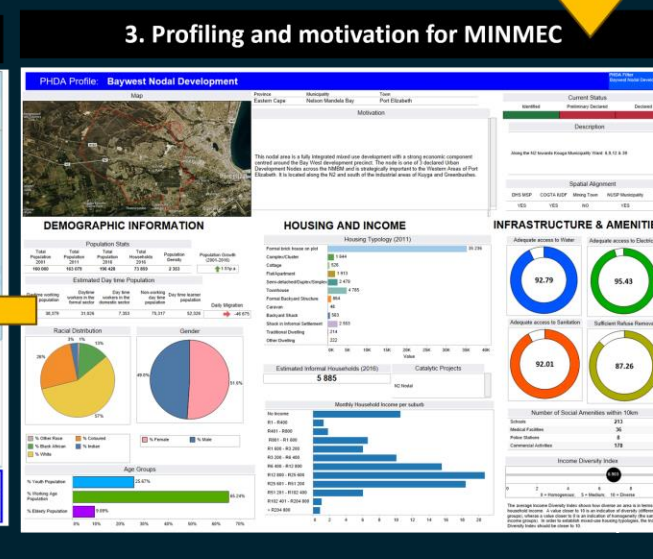
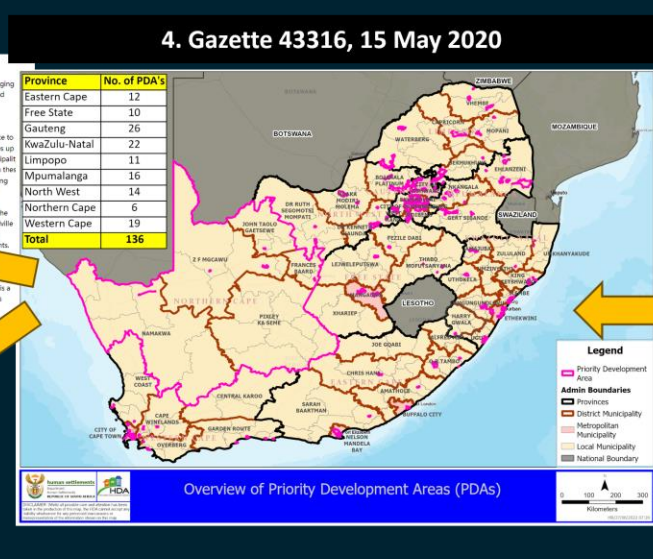
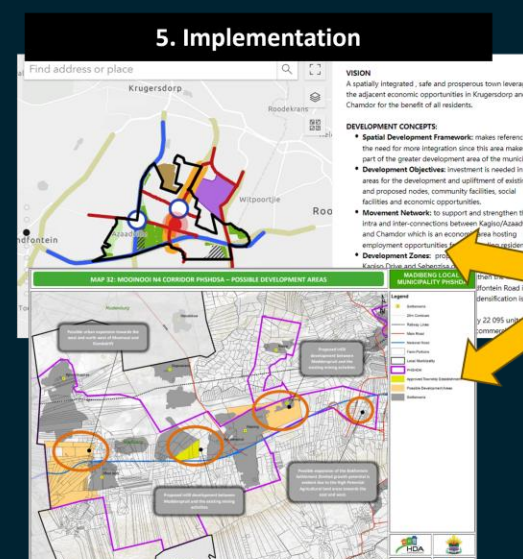


2. Consultation with Provinces, municipalities and sectoral departments

Human Settlements Spatial Transformation and Consolidation: Proposed Priority Housing Development Areas – Western Cape Province

Provincial and Municipal PHDA Consultations
February-March 2019

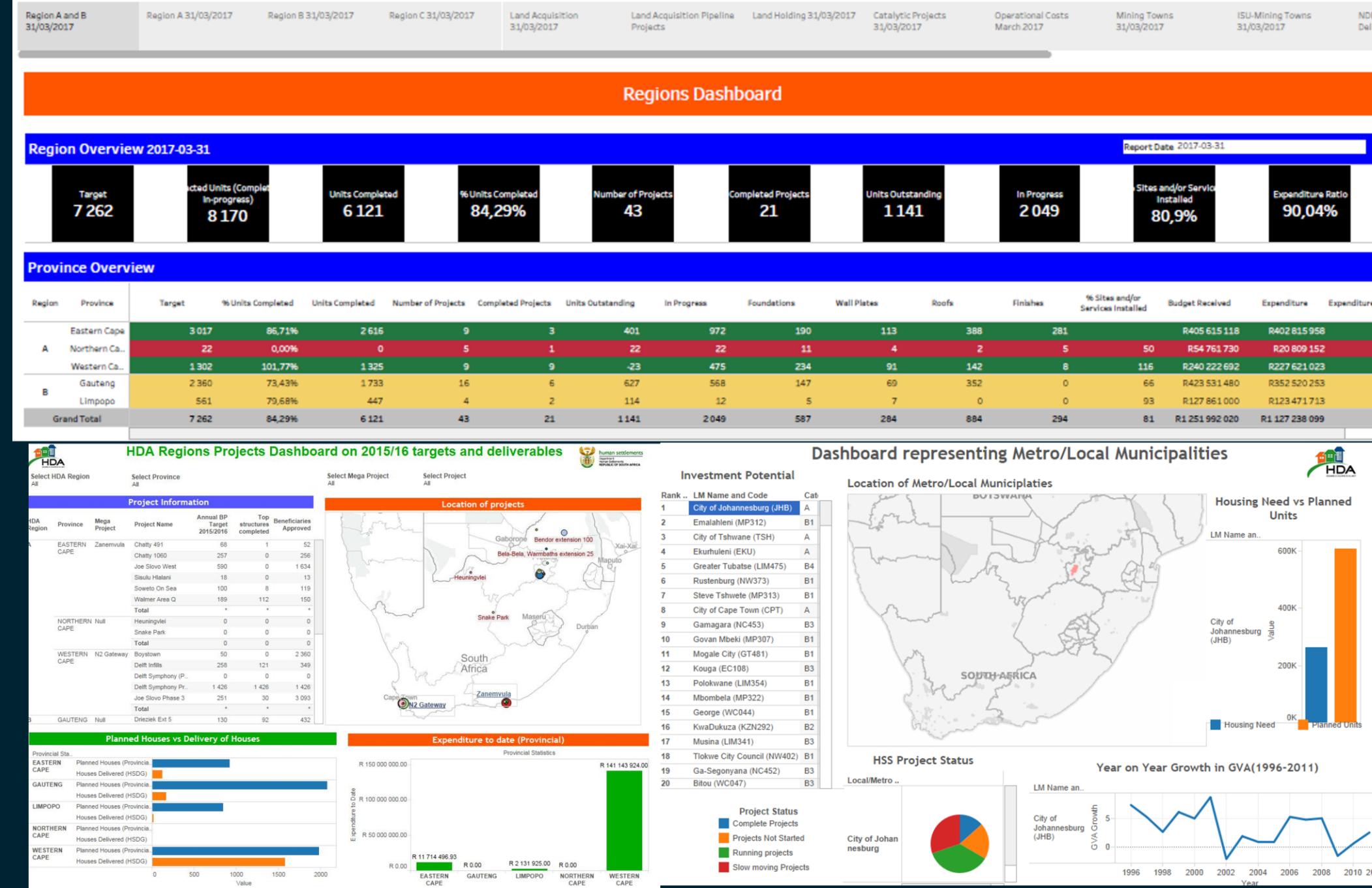
HOUSES • SECURITY • COMFORT



Application Development

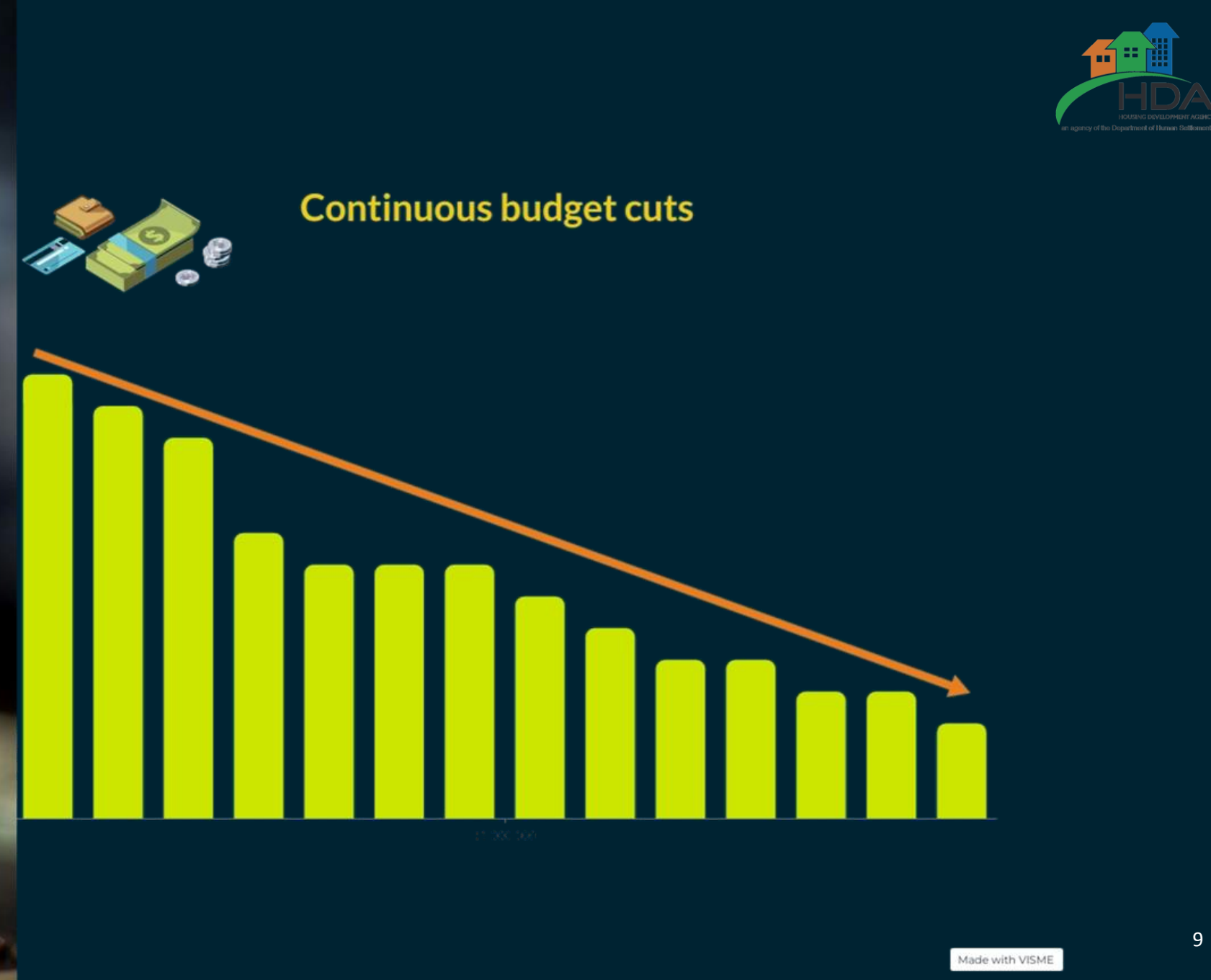
Establish the HDA's Command Centre Dashboard to **track performance** of the performance of all departments in the organisation.

This function was later handed over to Business Intelligence (BI) Department.



The cost of technology

1. Technology is expensive.
2. Funding at the HDA has made it difficult to procure new technologies due to continuous **budget cuts**.
3. Procurement processes are frustrating.



New business requirements (2020)

When the HDA appointed its first **Chief Operations Officer (COO)** in 2020, he wanted to have a comprehensive overview of his portfolio. **Operational reporting** was **fragmented** and there was no accountability for overall operational performance.

Project Name	Project Type	No. of Units	Foundations	Wall Plate	Roof Level	Units Complete	Units Handed Over	2015/2016 Expenditure	% 2015/2016 Budget Spent	Title Deeds Registered	Title Deeds Received	Title Deeds On hand	Title Deeds ISSUED to date	Title Deeds ISSUED YTD	Title Deeds ISSUED Actual YTD
Delft Symphony Precinct 4&6	BNG	2 377	2 377	2 377	2 377	2 377	2 377			2247	2247	196	2051	17	9
Delft Symphony Precinct 1&2		1 851	1 851	1 851	1 851	1 851	1 851	R 14 125.00	23.71%	1827	1821	915	906	96	58
Delft 7-9 & Delft 7-9 Ext		4 491	4 491	4 491	4 491	4 491	4 491	R -	0.00%	3431	3431	458	2973	38	11
New Rest		668	668	668	668	668	668	R -	0.00%	0	0	0	0	0	0
Joe Slovo		3 393	2 035	2 024	1 905	1 839	1 798	R 36 107 076.00	77.70%	636	636	420	216	636	216
Boys Town	BNG	1 392	503	503	503	503	503	R 4 344 357.00	36.54%	492	492	492	0	491	0
Delft Symphony 3 & 5	BNG	1 911	1 426	1 426	1 426	1 426	1 426	R 66 555 177.00	83.52%	826	583	583	0	583	0
Delft Infill Sites	BNG	389	258	258	231	121	118	R 32 599 784.00	46.56%	0	0	0	0	0	0
TRA 6								R 3 099 209.00	94.60%						

Province	Project Name	Annual BP Target 2015/16	Completed to date	In progress	Expenditure to Date	Beneficiary Approvals
GAUTENG	Drieziek Ext 5	130	185	92	R 17 945 677.25	432
GAUTENG	Orange Farm Ext 9	80	57	25	R 5 436 403.00	80
GAUTENG	Kanana Park Ext 2 (Weilers Farm)	381	326	49	R 28 485 642.25	381
GAUTENG	Lufheren	112	56	0	R 332 841.00	80
GAUTENG	Tudor Shaft	500	205	0	R 21 105 477.75	500
GAUTENG	Nellmapius Ext 21 & 24	500	7	0	R 720 674.85	100
GAUTENG	Eden Park West & Ext 1	177	0	0	R -	293
GAUTENG	Palm Ridge Ext 9	200	0	0	R -	2000
LIMPOPO	Disaster Housing	373	140	-	R 10 023 120.00	250
LIMPOPO	Enhanced People's Housing	100	0	-	R 0.00	40
LIMPOPO	Military Veterans	132	0	-	R 0.00	40
LIMPOPO	Bendor extension 100	240	0	-	R 0.00	0
LIMPOPO	Lephalale / Altoostyd Housing project					
LIMPOPO	Bela-Bela, Warmbaths extension 25	0	0	-	R 0.00	0

3. Organisational buy-in

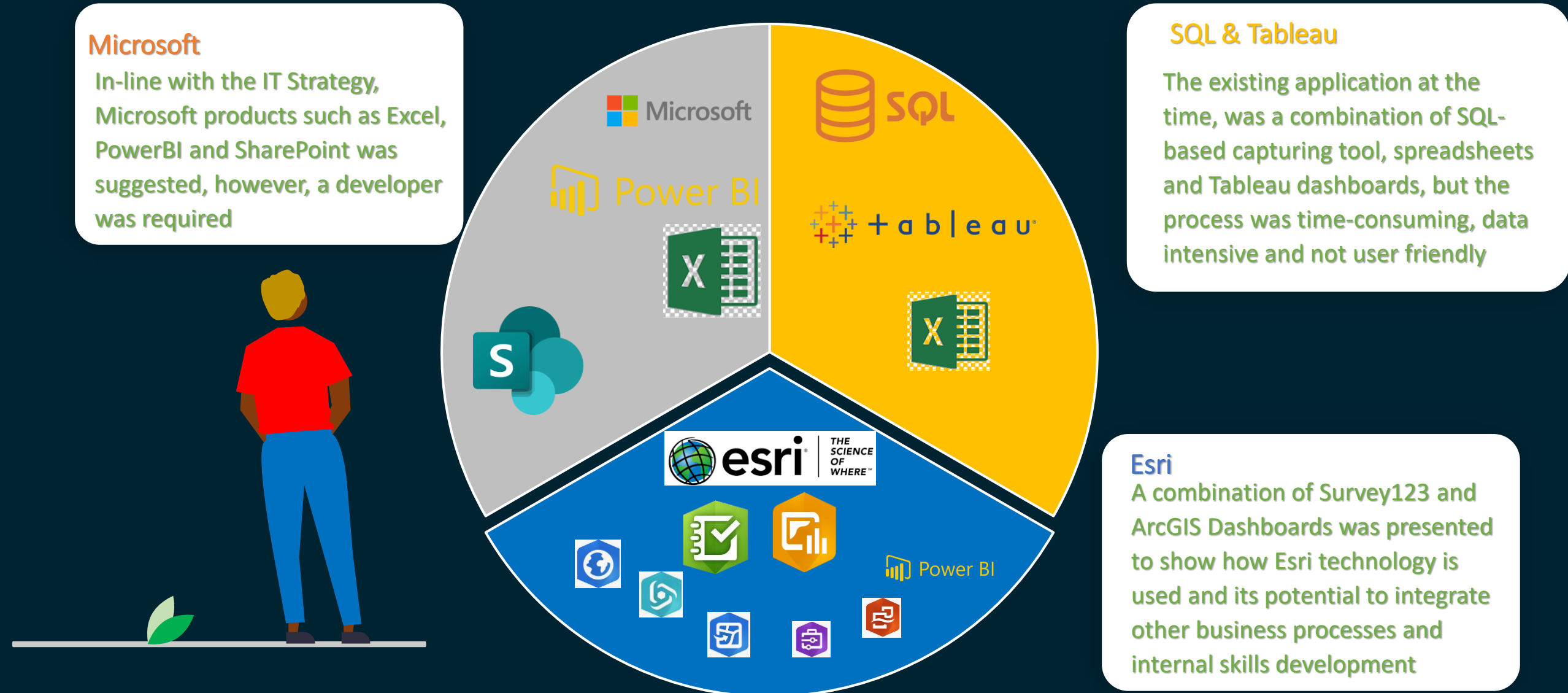
Using innovation to improve business processes

1. We targeted the COO's request to manage his portfolio holistically.
2. Consider the Minister's challenge to the sector to respond to the 4IR.
3. We engaged with departments responsible for project management to understand their requirements.
4. We could define the problem at hand which is to "***use technology to improve business processes.***"

Ideating and prototyping

The units responsible for technology - GIS, IT, BI and M&E - came together to brainstorm ideas to respond to the COO's requirements.

There was consensus that the **Esri solution** would best serve the organisation and that funding would be made available for the technology.



Approval of the Enterprise License Agreement (ELA)

Through the **Esri Framework** with **National Treasury** and **SITA** on cost containment measures on the procurement of software, service and products, the unit's motivation to enter an enterprise level agreement (**ELA**) with **Esri South Africa** was approved. This paved the way for the GIS unit in the HDA to use Esri-South Africa as its **key technology partner** in the Digital Transformation Process.



GIS Strategy

- ❑ 5-year vision aligned to MTSF
- ❑ Measurable outcomes
- ❑ Identified Esri technology as ultimate solution
- ❑ Technology focused
- ❑ Stakeholder-oriented
- ❑ Internal skills development



Regulations

- ❑ NT-SITA-ESRI Framework gave us more leverage to implement GIS Strategy
- ❑ Focus on cost-containment measures
- ❑ Addressed red tape around procurement

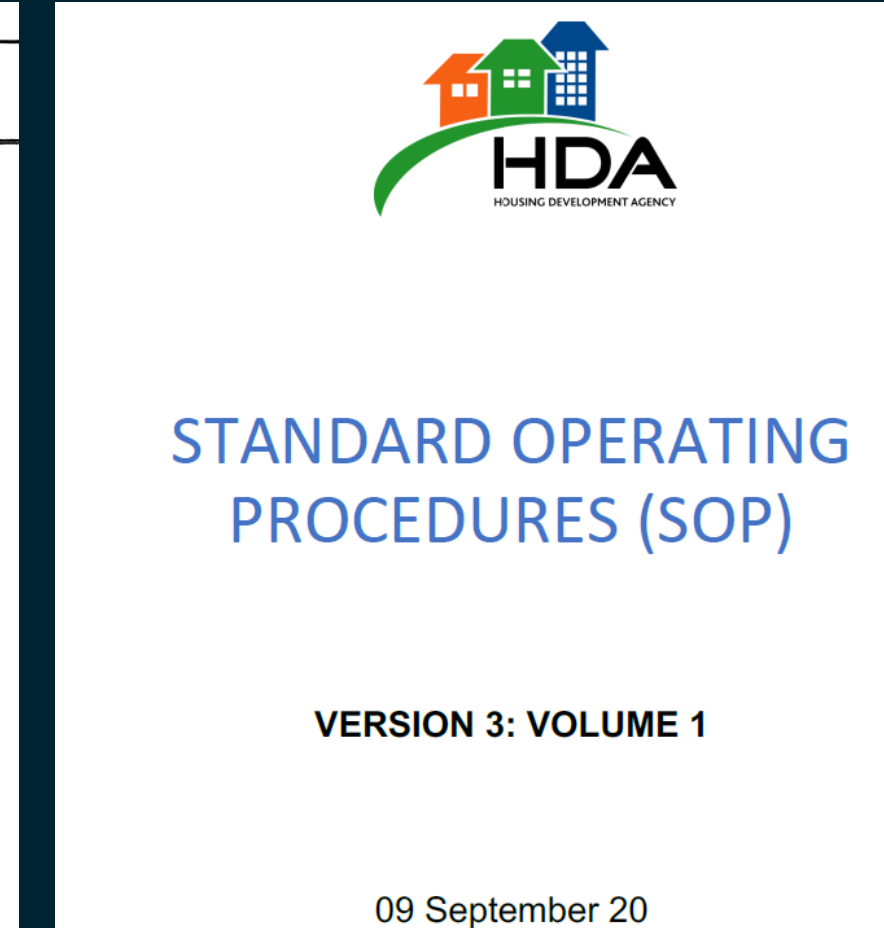
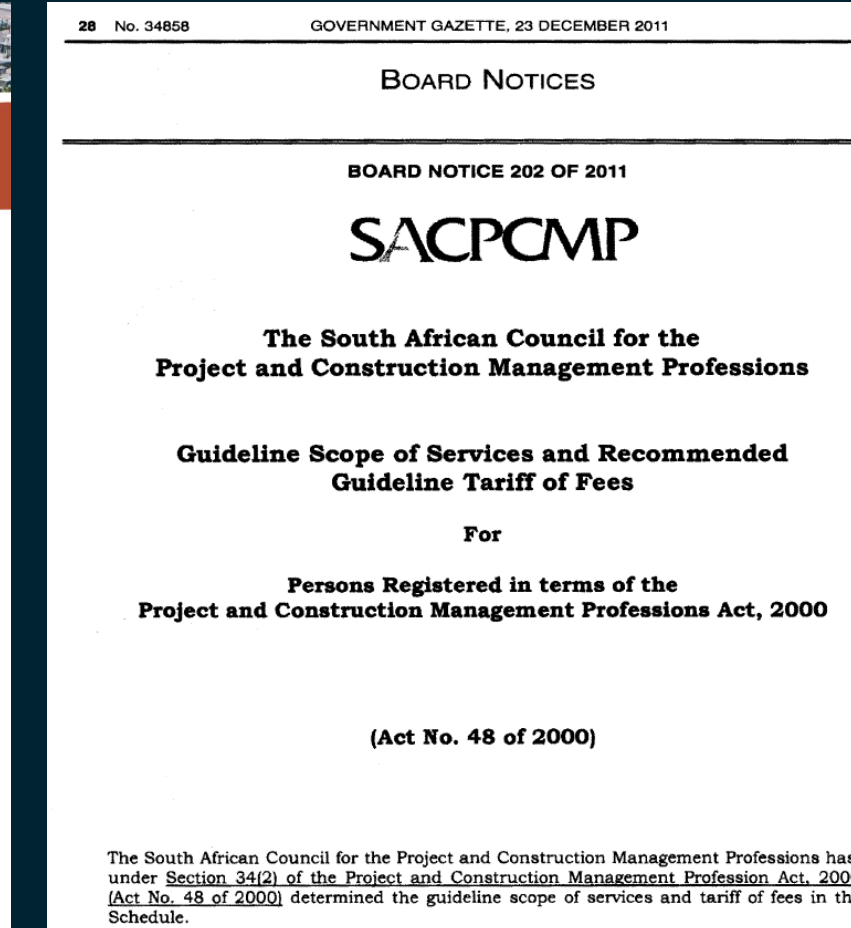
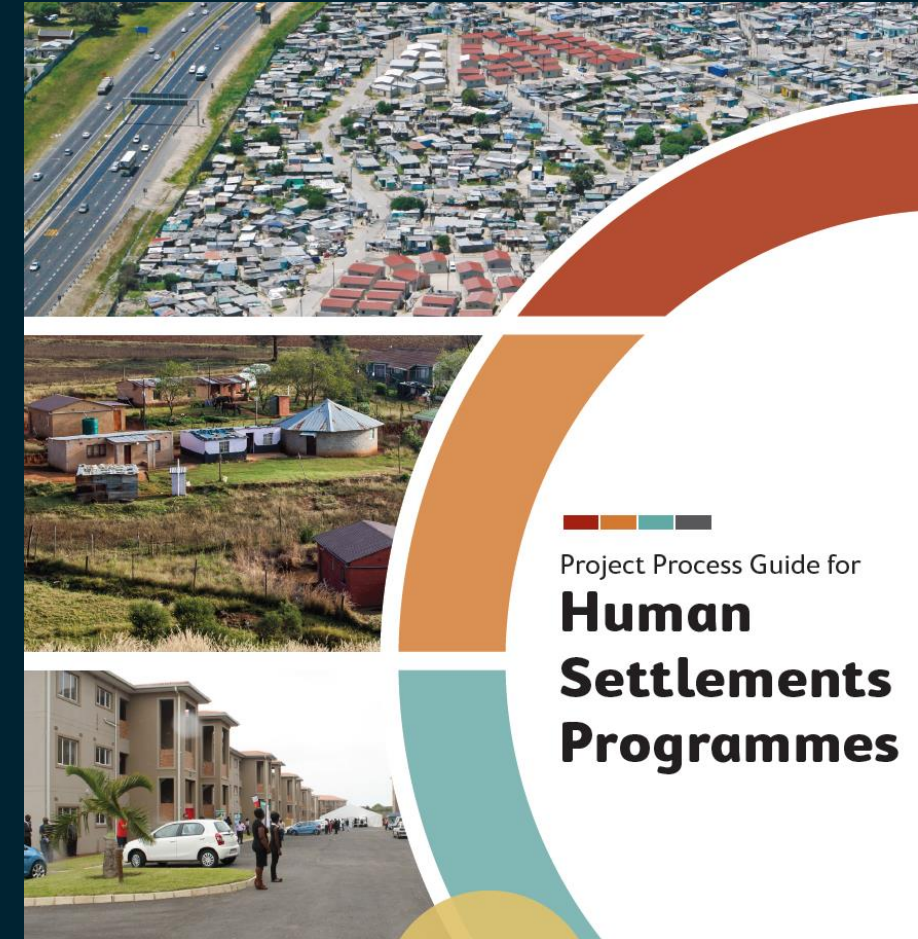


Partnerships

- ❑ Ended contract with previous SP for further cost-savings
- ❑ Opportunity to work with industry leader
- ❑ Complete digital ecosystem to cater for almost all aspects of the organization.
- ❑ Combined talents from inside and outside the organisation

Stakeholder consultation and feedback

1. We developed the **first draft** of the Project Tracking Tool in Survey123, focusing on our two main KPA's, namely the delivery of (i) **housing units** and (ii) **serviced sites**.
2. We presented this draft to all internal stakeholders.
3. The stakeholders recommended that the project tracking tool should be aligned to **industry standards**.
4. Stakeholders requested us to **track other KPA's** such as (iii) title deeds registrations, (iv) temporary residential units, (v) relocation projects, (vi) planning projects, (vii) bulk infrastructure projects, (viii) internal services, etc.



First Organisation-wide roll-out

The **Project Tracking** tool was then rolled out to accommodate most other business units in the organisation. With all the new requirements, the application started to become complicated, because it required too much user input, it required users to update (overwrite) existing records and users had to go through sections that they were not responsible for.

HDA Project Tracking Tool

Project Description

Project Name *

Project Code *

Project Overview *

Sub Project/Phase/Township

Sub Project Code

Report Date *


Saturday, 21 October 2023

TEST Date *

Saturday, 21 October 2023

Location string *

26.021°S 28.072°E ± 143 m



Location string *

-26.02064964341631 28.07185935086639 0 143

Location Information *

Intervention Type *

Project Type *

HDA Project Tracking Tool

Project Description

Readiness Matrix

Contract Data

Budget and Targets

Targeted Intervention *

Project Budget (Rands) *

Number of Beneficiaries Approved

Top structure

Top Structure Target

Top Structure Quarterly Breakdown

Q1 Top Structure Target	Q2 Top Structure Target
Q3 Top Structure Target	Q4 Top Structure Target

Stand pipes Target

Toilets Target

Service Sites Target

Project Start date *

Date

HDA Project Tracking Tool

Budget and Targets

Progress

Overall Project Status *

Expenditure to date *

Number of service sites completed

Status of sites completed

0 25% 50% 75% 100%

Number of stands completed

Number of stand pipes delivered

Number of Toilets delivered

Foundations Completed

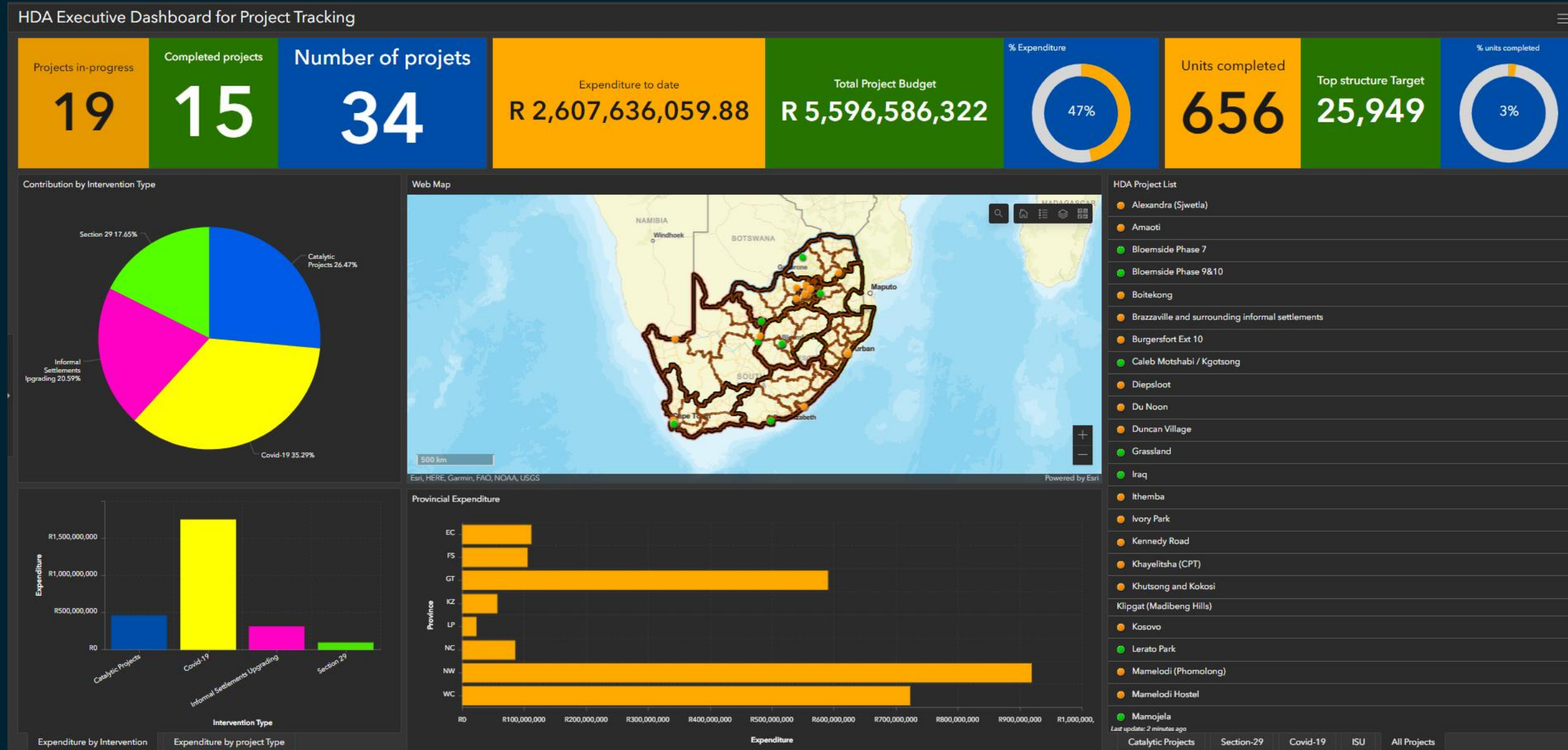
Wall plates completed

Roofs installed

Finishes Completed

Units completed

Number of FURs completed



The first **Project Tracking Dashboard** provided a snapshot of the status quo of projects in the organization, BUT

- the application started to become complicated,
- it required too much user input,
- it required users to update (overwrite) existing records and users had to go through sections that they were not responsible for.
- It could not track trends and other strategic priorities effectively

4. Improved operations to deliver

Complex requirements, beyond the basics

In order to meet complex requirements, the HDA worked with **Esri's Professional Services** to implement **new solutions** that went over and beyond the basic functionalities of Survey123.

- This included a **more improved user experience** for data capturers by creating two surveys
- **Advanced calculations** that assisted with functions automated data capturing.

The screenshot displays the 'Base Information Tracking Tool' interface, which is a complex survey form. It is organized into several main sections:

- Project Definition:** Includes fields for Project/ Settlement Name, Project Code, Project Overview, Project Objectives, Project Start Date, Expected Project End Date, Project Yields, Location (with a map), Location Information, Select Area, Housing Programmes, Intervention Type, Legacy Projects, HSS Number, and HSS-.
- Feasibility:** Divided into 'Project Inception' (Social Facilitation Group, Land, Geotech, Environmental Group) and 'Property Description'. It includes numerous checkboxes and dropdowns for various approvals and reports.
- Progress per Financial Year:** Features a progress bar for 'Financial Year (Ending) *' (2024) and 'Information per Year (2024)'. It also includes a 'Budget for Financial Year' section with 'Quarterly Targets' (Q1-Q4) and 'Top Structure Targets'.
- Close-out:** A 'Project Close Out' section with multiple dropdown menus for tracking the completion of various tasks like 'Works Completion Certificate', 'As-build plans and design documentation', 'Occupancy Certificate', etc.

At the bottom of the interface, there are navigation arrows and page indicators (e.g., '1 of 5', '2 of 5', '4 of 5', '5 of 5').

Base Information Capture Tool



You are capturing Weekly Feedback for:
Project: Palmridge Ext 9
Municipality: Ekurhuleni
Financial Year: 2024
Fin Year ObjectID:1959
Weeks Captured: 13, 18, 22, 27, 31

Expenditure to date confirmed by Finance
 R0.00
 0

Progress for week

Please note: Data have been pre-populated from week number 31

Tracking week *
 Tuesday, 31 October 2023

If you would like to edit the Tracking Week date of this record - click on Yes below
Important: To add a new progress record, click on the + at the bottom of the page
 Alternatively, to edit this record's date, click on Yes and edit the date
 Yes

Capturing for week: 31

Overall Project Status *
 Completed

All information should be captured Cumulatively, i.e. year-to-date

Total value of claims submitted to date
 R448,520.24
 448520,24
 Invalid number

Expenditure to date confirmed by Finance
 R448,520.24

Top Structure Progress

Foundations in progress
 0

Foundations Completed
 8

Wall plates in progress
 0

Wall plates completed
 8

Roofs in progress
 0

Roofs installed
 8

Finishes in progress
 0

Finishes Completed
 8

Number of units in progress (calculation)
(automated sum of foundations, wall plates, roofs, and finishes in progress)
 0

Top Structure Units completed
 Target: 8
 8

Progress by Housing Typology


Project Balance
 0

Overall Progress: 100%

- Non Construction Deliverables
- Add Photos

Add Photos

Project photos



SubProj_project_photos-20231015-180255.jpg

1 of 1

Camera, Add, Delete, More icons


Risk and Challenges

+ (Add icon)

Narratives

High level summary of project progress
 Project is complete.

Signatures

Name of Capturer	Signature
Sello Tshoane	
Name of Approver	Signature


```
✓ myFunctions.js
32
33
34 function diff_weeks(dt_1,yearval){
35     var dt1 = new Date(dt_1);
36
37     var d = new Date();
38     var n = yearval;
39
40     var dt2 = new Date(n.toString() + "-04-01T00:00");
41
42     var diff =(dt1.getTime() - dt2.getTime());
43     var days = diff/(1000*60*60*24);
44     var weeks = Math.floor(days/7) + 1;
45     return weeks;
46 }
47
48 function getCapturedWeeks(arrayVals){
49     return arrayVals.join(", ");
50 }
51
52 function getDeliveryArray(dateVals){
53     //Q1 = 30 June
54     //Q2 = 30 September minus (-) 30 June
55     //Q3 = 31 December - 30 September
56     //Q4 = 31 March - 31 December
57     var arrayLength = dateVals.length;
58     var months = [];
59     for (var i = 0; i < arrayLength; i++) {
60         months.push(toMonthName(dateVals[i]));
61     }
62     return months.join(",");
63 }
```

Script files: 2
functions.js
myFunctions.js

5. Demonstration

ArcGIS Survey123

HDA Projects Weekly Progress Tracking Tool

You are capturing Weekly Feedback for:
Project: Southern Africa Esri User Conference 2023 - Top Structure
Municipality: KZN235
Financial Year: 2024
Fin Year ObjectID:2018
Weeks Captured: 5, 9, 13, 18, 22, 27

▼ Progress for week

Please note: Data have been pre-populated from week number 27

Tracking week *

Sunday, 30 April 2023

If you would like to edit the Tracking Week date of this record - click on Yes below
Important: To add a new progress record, click on the + at the bottom of the page
 Alternatively, to edit this record's date, click on Yes and edit the date

Yes

Capturing for week: 5

Overall Project Status *

On Track

All information should be captured Cumulatively, i.e. year-to-date

Total value of claims submitted to date
 R100,000.00

HDA Spatial Information and Analysis Hub

Individual Project Dashboard

Financial Year: 2023/24 | Province: KwaZulu-Natal | Project Type: Top Structure | Sub Project: Southern Africa Esri User Conf... | Select last day of the Month: 30/09/2023

Project Delivery against Target: 75

% Project Delivery against Target: 75.0%

Monthly Delivery against Target

Month	Delivery
Apr	10
May	10
Jun	15
Jul	15
Aug	10
Sept	15
Oct	25

HDA Construction Project Tracking Tool Web Map

Claims submitted against Budget: R 750,000

Annual Delivery against Target: 100

Quarterly Delivery

Quarter	Delivery
Q1	35
Q2	40
Q3	25

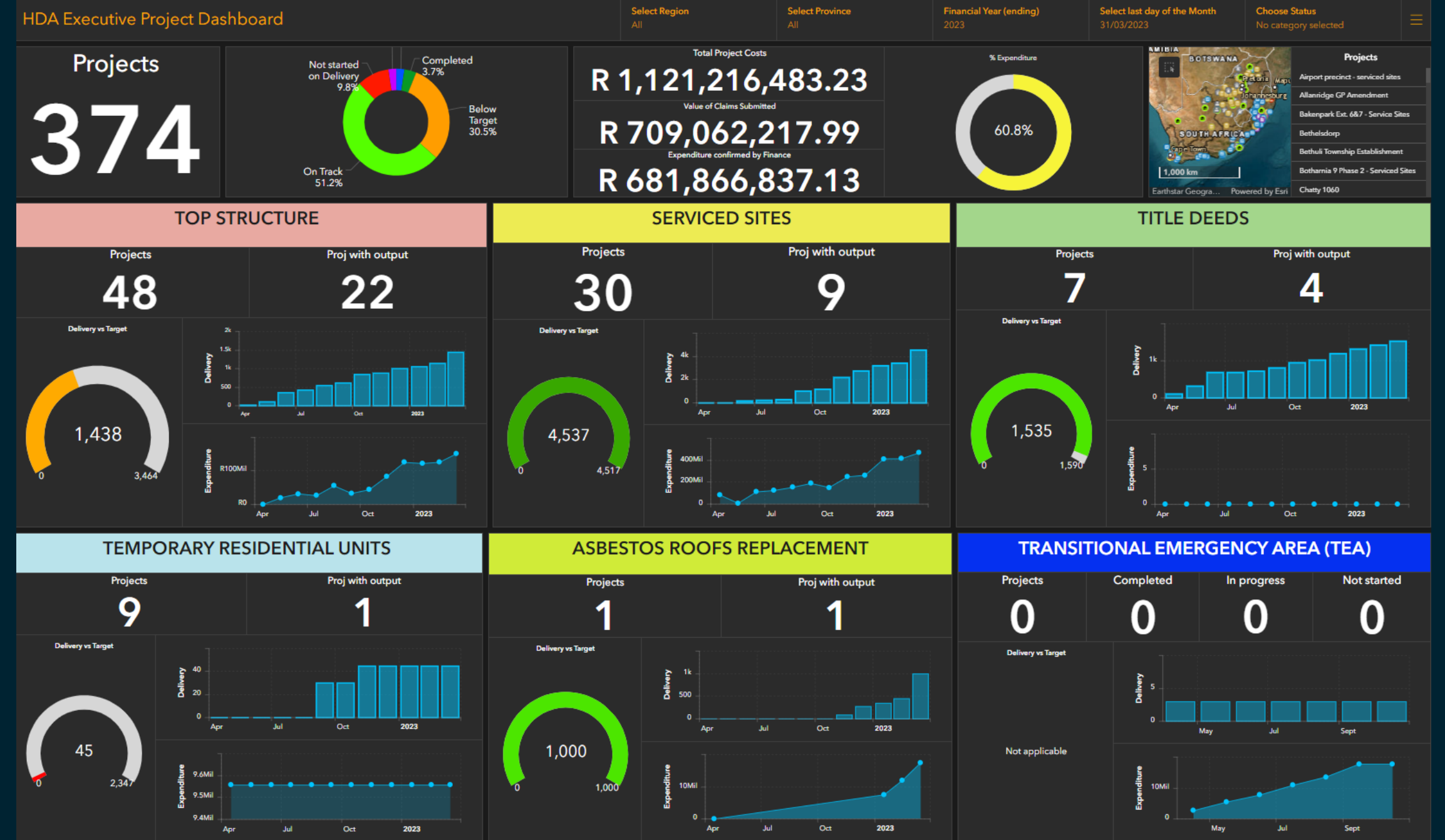
Provincial Performance | Executive Overview | Individual Project Dashboard | Challenges | Project Summary Table | Project Targets | APP Performance



Executive Overview Dashboard

Used by Executives:

1. Number of projects
2. Project status
3. Operational Expenditure
4. Monthly performance
5. Location



Provincial Performance

Used by Regional and Provincial Managers

1. Monthly and quarterly delivery
2. Expenditure
3. Comparative trends





Individual Project Dashboard

Used by Project Managers to keep track of:

1. Monthly and quarterly delivery
2. Milestones
3. Expenditures
4. Photos

Challenges and Mitigation



Reason for current performance (Challenge 1)

Recovery Plan/ Mitigation Strategy (1)

Delay in progress due to inclement weather

Contractor to supply revised programme

This project is block by Provincial Department due to the beneficiary issues.

Escalated to the Province and RM office

Lack of funding for concrete footing to support the dividing wall in semi-detached house that has been demolished, and lack of funding for houses of 8 disabled beneficiary.

Proposal submitted to province to utilise the Tranche funds.

Shortfall in funding of rectification of slabs (83 Slabs) and the demolishing of slabs (33 slabs to be demolished and rebuilt)

Draft proposal to relocate funds from the non-performing project to the performing project. To allocate additional units to the performing contractors (15%)

Some contractors are unable to purchase material on credit. No credit facility with the suppliers.

The COO's office to look at the policy see whether it can be reviewed

Contractor temporarily suspended works due to expired construction work permit. this will lead to contractor standing time costs.

Agreement with the the OHS sub-consultant must be reached soon

Lack of beneficiary approvals

Include destitute beneficiaries in the project. All destitute beneficiaries will qualify for a 40m2 house. Potential of 28 beneficiaries are currently awaiting approval of HSS

Termination of contract.

Procurement of new contractor.

There contractor has terminated the contract.

Appointment of Attorneys to handle the litigation procedures

The contractor was completing previously installed civil services that were damaged and adding stand connections where they were missing.

The remedial works on the damaged previously installed pipes (water and sewer) and also continuously fixing the flood damaged layer works to allow for paving of the roads, thus slowing down the contractors progress on site with th p

Local SMMEs without capacity to deliver on time, due to cashflow constraints

To assist the contractors with paying for Materials on site, and also to pay our service providers within 14 days of receipt of invoices.

Delayed payments by the client

Finance to make payments within 14 days

• Approval of building plans continue to be an issue & contract between client and contractor expired

Approved building plans continue to be an issue. Availability of the project team members is an issue when scheduling monthly project meetings.

Outcomes

- **Every day**, we presented the Project Dashboards to a different province at 7:30 am.
- Project Managers used the dashboard to **present** project performance and bottlenecks if projects are not performing.
- **Other departments** such as Finance, SCM and IGR were invited as and when required.



Positive

- Leadership supported technological innovation
- Data was used to support decision-making.
- Collaborative outlook
- Accountability led to improved service delivery.



Negative

- Leaders were not tech-savvy and the overall adoption rate was slow.
- Still ambiguous reporting on different platforms
- Change in leadership
- Colleagues “fear us”, because our technology is “exposing them”

Other Outcomes

HDA Spatial Information and Analysis Hub

HDA Spatial Information and Analysis Hub

USERS: LAST 7 DAYS USING MEDIAN

LOAD TIME VS BOUNCE RATE

Median Page Load (LUX): 2.056s

Bounce Rate: **57.1%**

START RENDER VS BOUNCE RATE

Median Start Render (LUX): 1.031s

Vision

Our vision is to make spatial information available to our stakeholders so that we can empower them with information to make informed decisions.

①

Understand requirements

Our aim is to understand the strategic and operational needs of our stakeholders.

②

Use technology effectively

Once our stakeholder needs are determined, we use appropriate technologies to address their requirements.

③

Create information

With the appropriate technologies, we will create data, use existing data and apply methodologies to create information assets.

④

Support decision-making

The information assets that we create will be made available to various stakeholders for data-driven decision-making.

Key statistics

<small>Hectares of land released by the HDA since 2009</small> 26,623.2 <small>(until 20 June 2023)</small>	<small>Hectares of land acquired by the HDA since 2009</small> 21,690.2 <small>(until 30 June 2023)</small>	<small>Priority Development Plans with Implementation Plans</small> 97 <small>(as at 15 October 2023)</small>	<small>Serviced Sites delivered by the HDA since 2015/16</small> 31,496 <small>(until 15 October 2023)</small>	<small>Housing units delivered by the HDA since 2015/16</small> 36,002 <small>(until 15 October 2023)</small>	<small>Title Deeds registered since 2019/20</small> 5,682 <small>(until 15 October 2023)</small>
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Collaboration with the National Department of Human Settlements

The HDA contributes to Priority 5 of the 2019-2024 Medium Term Strategic Framework (MTSF) of the National Department of Human Settlements (NDHS). The focus is on spatial integration, human settlements and local government.

National Department of Human Settlements website

National Department of Human Settlements Information Portal (concept)



KZN Floods Disaster Management

After the April 2022 Floods that devastated many parts of the KwaZulu-Natal (KZN) province, the Housing Development Agency (HDA) has been responsible for assisting in identifying and assessing suitable vacant land that affected families can be relocated to.

KZN Floods Disaster Management Website

eThekweni Floodline Vulnerability Exposure Dashboard

Dashboards

Dashboards are designed to provide a holistic overview of a particular theme. It provides users with an interactive tool that visually tracks, analyzes and display key data and information of that particular theme.

<p>HDA Operational Projects Dashboard</p> <p>This dashboard combines multiple dashboards related to the construction projects.</p> <p>Click to open Dashboard</p>	<p>Catalytic Projects Programme Dashboard</p> <p>Overview of Catalytic Projects</p> <p>Click to open Dashboard</p>	<p>Land Assembly Register Dashboard</p> <p>Click to open Dashboard</p>	<p>Land Acquisition 2021/2022</p> <p>This dashboard shows land acquired in the financial year 2021/2022</p> <p>Click to open Dashboard</p>
<p>Land Holding and Management Dashboard</p> <p>Overview of all land parcels and properties that are being managed by the HDA. The...</p> <p>Click to open Dashboard</p>	<p>NDHS response to Covid-19 - Operations...</p> <p>Dashboard of facilities that were identified as quarantine or isolation sites</p> <p>Click to open Dashboard</p>	<p>Contracts Tracking Register</p> <p>Summary of the HDA Contracts Management Register. This application was developed in...</p> <p>Click to open Dashboard</p>	<p>HDA Finance Report</p> <p>Finance report</p> <p>Click to open Dashboard</p>
<p>Transformation and Empowerment Dashboard</p> <p>Transformation and Empowerment tool has been developed, to record and track all Transformation and Empowerment matters</p> <p>Click to open Dashboard</p>	<p>Human Settlements Spatial Information Application (HuSSIA)</p> <p>Portfolio of NDHS</p> <p>Click to open Dashboard</p>		

Web Applications

The purpose of Web applications is to allow users access to 2D and 3D maps. These applications have different purposes and are based on specific themes analysis, maps and infographics. Web applications are interactive and have additional functionalities to capture, update or report on spatial information.

<p>Land & Property Spatial Information System...</p> <p>Land and Property Spatial Information System</p>	<p>DHS Integrated Spatial Application</p> <p>DHS & DWS Portfolio</p>	<p>National Informal Settlements Database</p> <p>Central hub where informal settlements information can be accessed, created and edited</p>	<p>NaHSLU Analysis</p> <p>The National Human Settlements Land Indices (NaHSLU) were developed to...</p>
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Capture Tools

Capture tools were developed to capture base information in a form-centric solution for creating, sharing and analysing surveys. These surveys are best populated in the Survey123 field application, however, the web application can also be used to complete the surveys.

<p>Beneficiary Administration</p> <p>This tool is designed to capture and verify beneficiary information</p> <p>Take Survey</p>	<p>HDA - Beneficiary Experience Tracking Application</p> <p>HDA BETA Application</p> <p>Take Survey</p>	<p>HDA Projects Weekly Progress Tracking Tool v2.1</p> <p>Capture weekly progress on project information</p> <p>Take Survey</p>	<p>Construction Project Base Information Capture Tool V2</p> <p>Capture base information of construction projects</p> <p>Take Survey</p>
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Administration Programme

The Administration programme provides effective leadership, strategic management and administrative support to the HDA in line with applicable legislation and best practice. It does so by ensuring that there is effective and efficient administration and governance within the organisation. The programme has the following Sub-programmes: Audit and Risk, Corporate Support Services, Finance, Strategy and Organisational Performance and Communication and Marketing.

<p>Finance</p> <p>Manages and provides financial management services.</p> <p>Link to Finance Action Plan</p>	<p>Project Finance</p> <p>Project Finance Management manages and reports on funds received by the HDA from various provinces and/or municipalities to finance projects as per signed funding agreements.</p>	<p>Supply Chain Management</p> <p>Supply Chain facilitates the development and monitors the implementation of supply chain management policies, processes and systems. It also provides procurement management services within the organisation.</p>
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Knowledge Management

In this section users can access documents, presentations, spreadsheets, maps and infographics on work that has been done in the organisation.

<p>Maps</p> <p>Access to maps produced by the Geographic Information Systems (GIS) team for property mapping and profiling, land acquisitions, pre-feasibility studies and spatial analysis.</p> <p>Details View</p>	<p>Infographics</p> <p>Access to research-based infographics developed by the Knowledge Management, Research and Monitoring and Evaluation Team.</p> <p>Details View</p>	<p>Projects</p> <p>Access to project-related information, such as maps, reports and documents, across all programmes and projects.</p> <p>Details View</p>
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GIS Atlas 2022/2023

Location driven insights to inform, support and drive data-driven decision-making

[Explore](#)

HDA Social Media

Housing Development Agency (HDA) @the_hda · Oct 20

Did you know? The concept of homeownership dates back thousands of years. What does owning a home mean to you?

#TheHDA #FridayFun #HousingTheNation #RebuildTheHDA

Contact Us

INQUIRIES
011 544 1000

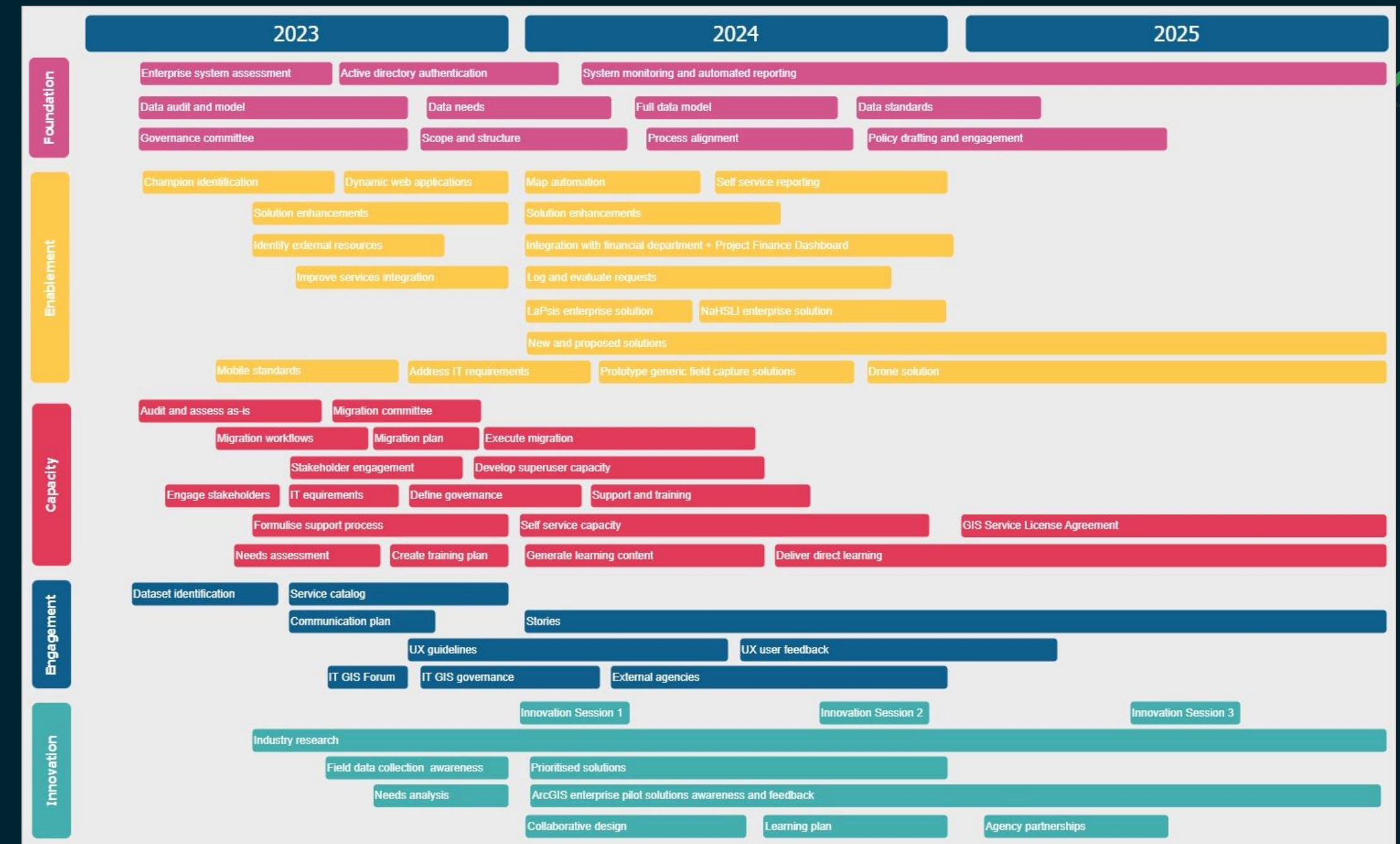
johan.minnie@thehda.co.za (general inquiries)
hadley.remas@thehda.co.za (GIS inquiries)
kanisha.busgeeth@thehda.co.za (M&E inquiries)



Looking ahead

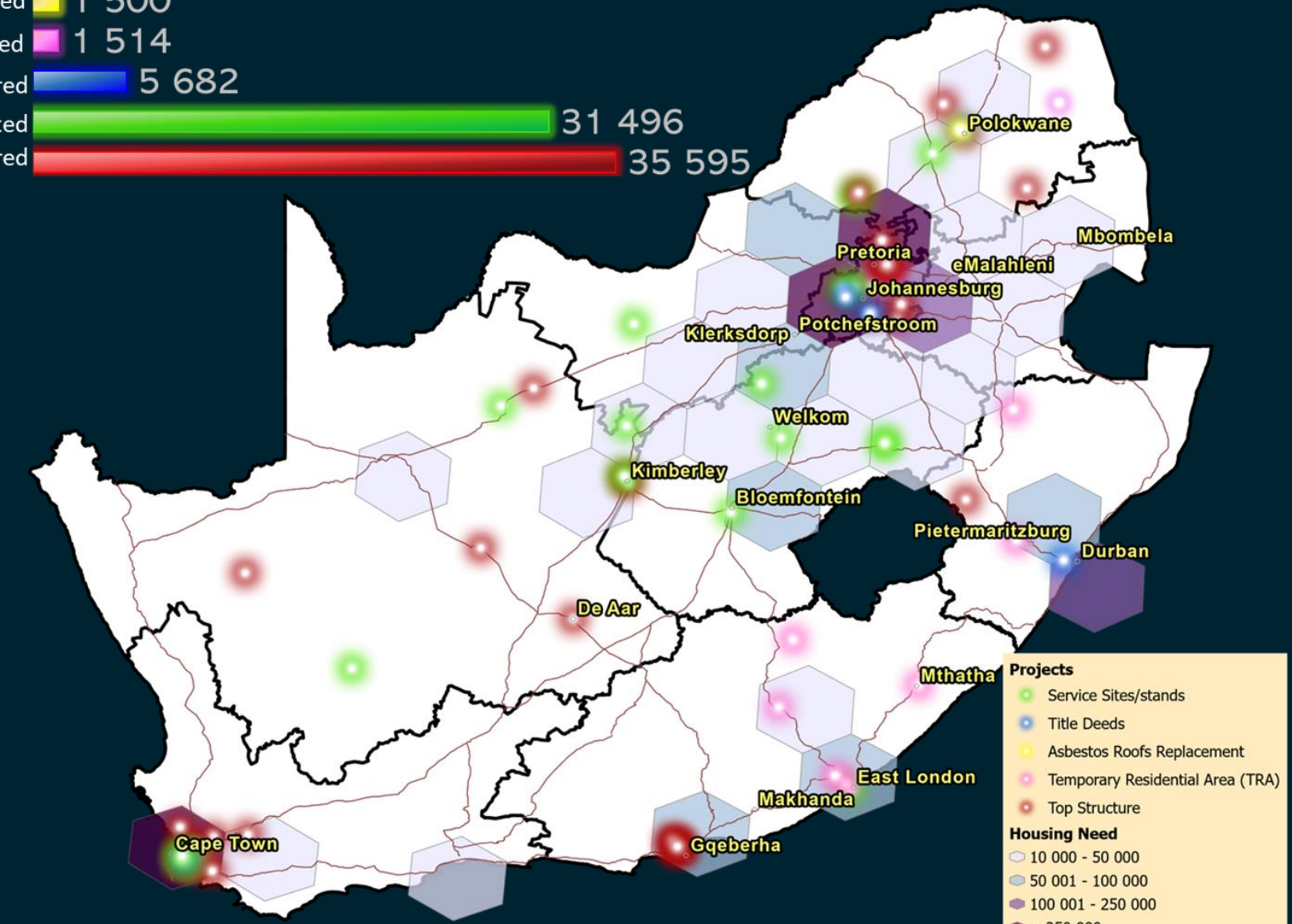
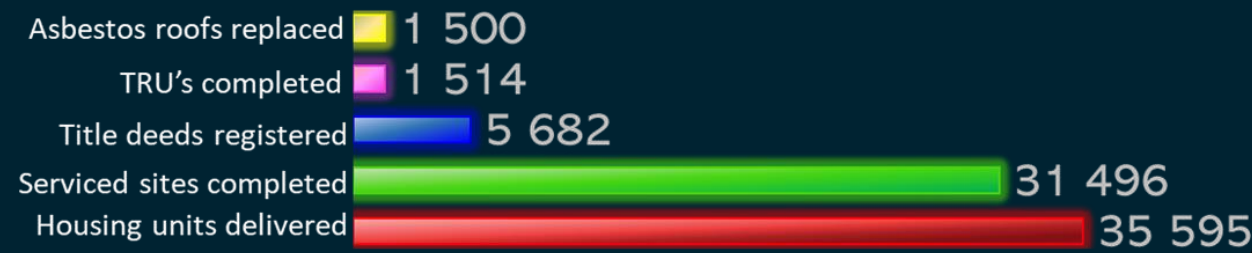
The **2022/23 GIS Strategy** was developed to build on what we have achieved over the past three years. Our vision is to:

- **Improve governance** on technologies, data standards, communication and geospatial analytics.
- Develop **self-service applications** that can improve stakeholders' access to information.
- **Continuously improve** our service offering to stakeholders



6. The impact of technology to uphold our mandate
"to facilitate the creation of sustainable Human Settlements and improved quality of household life"?

Improved performance



Beneficiary Experience Tracking Application (BETA)



