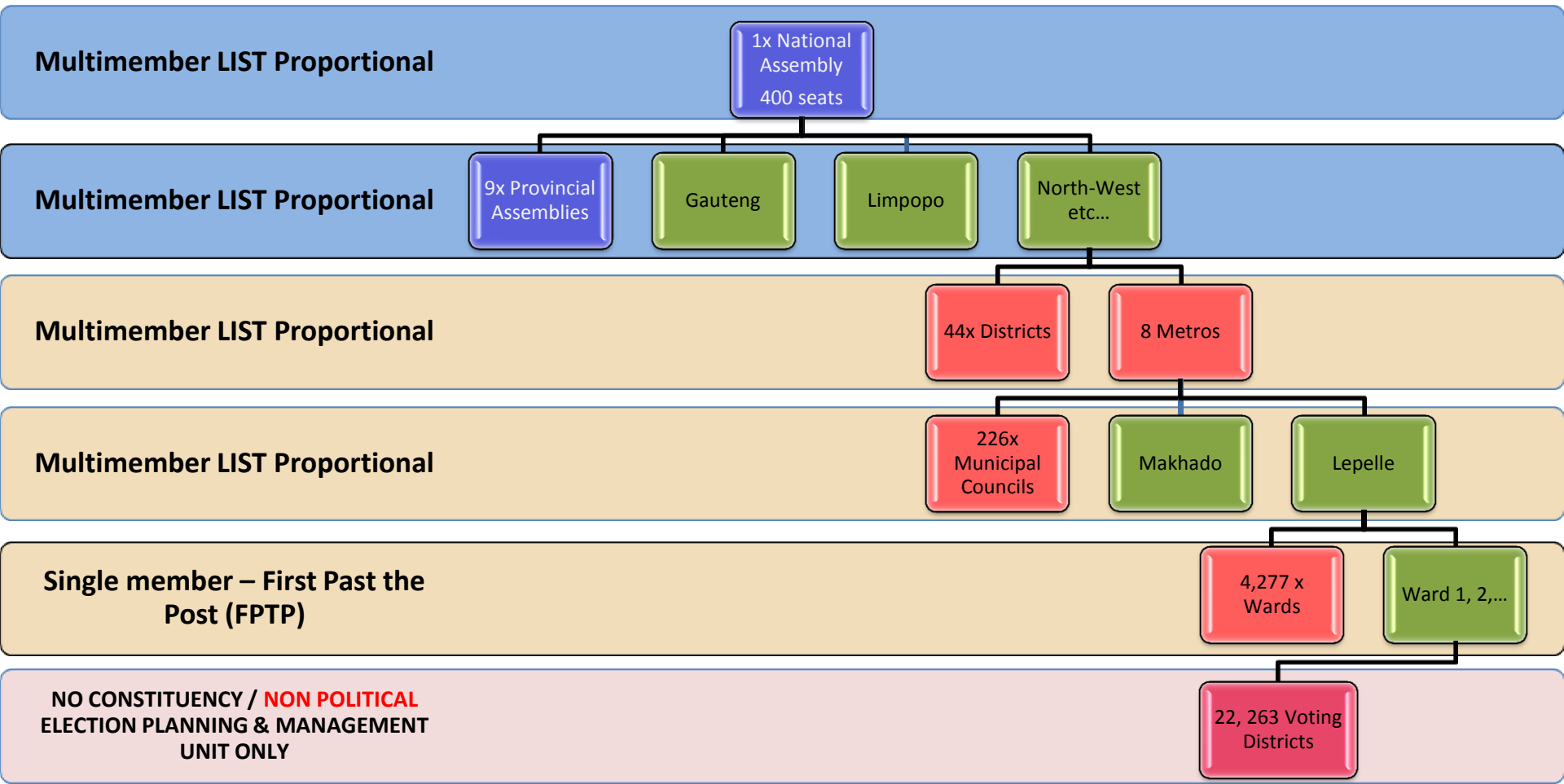


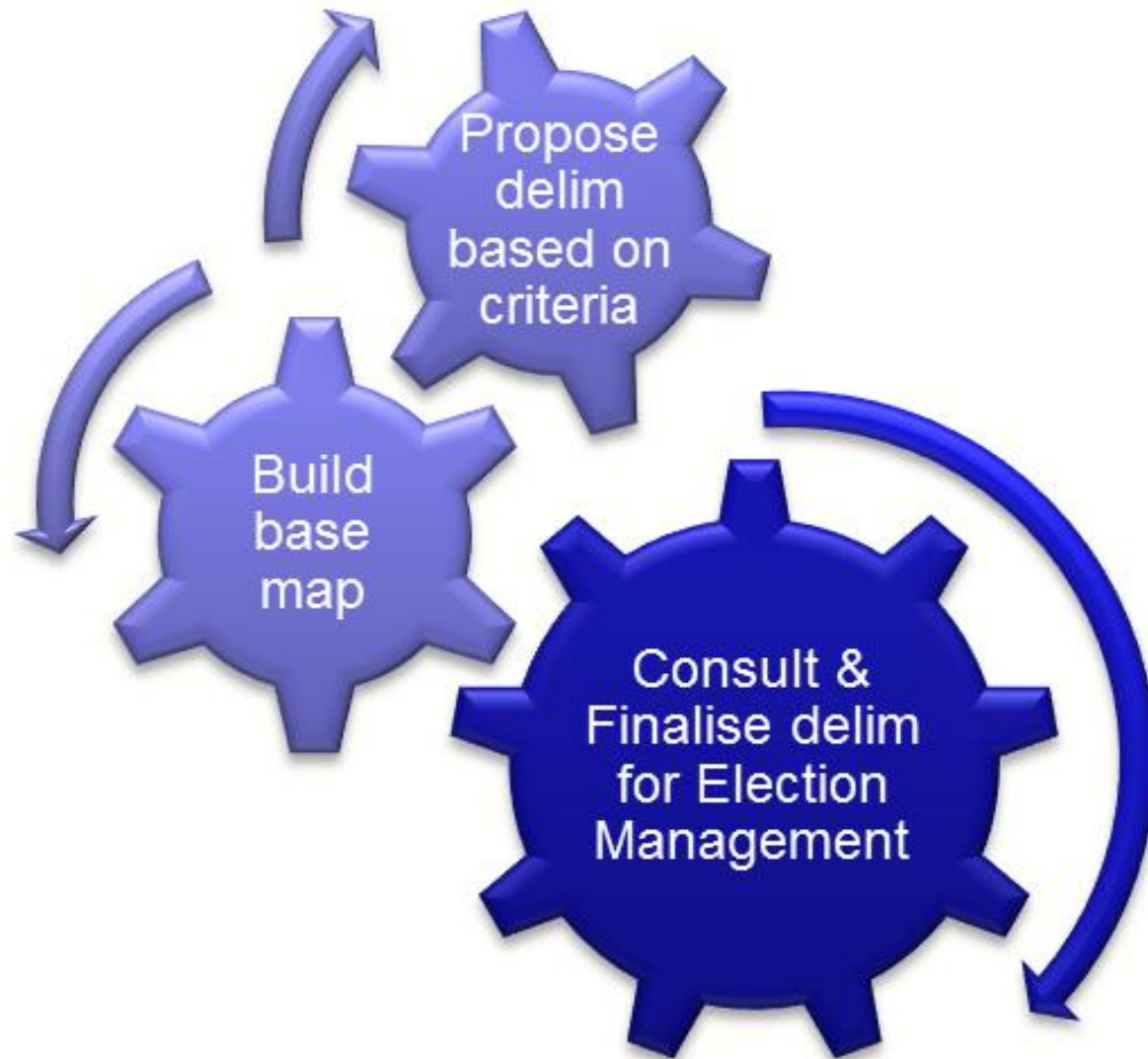
# SPOT 5 AT IEC

QUALITY ENHANCEMENT TOOL FOR  
ELECTION MANAGEMENT

# South Africa – electoral systems and boundaries



# Major GIS roles at the IEC



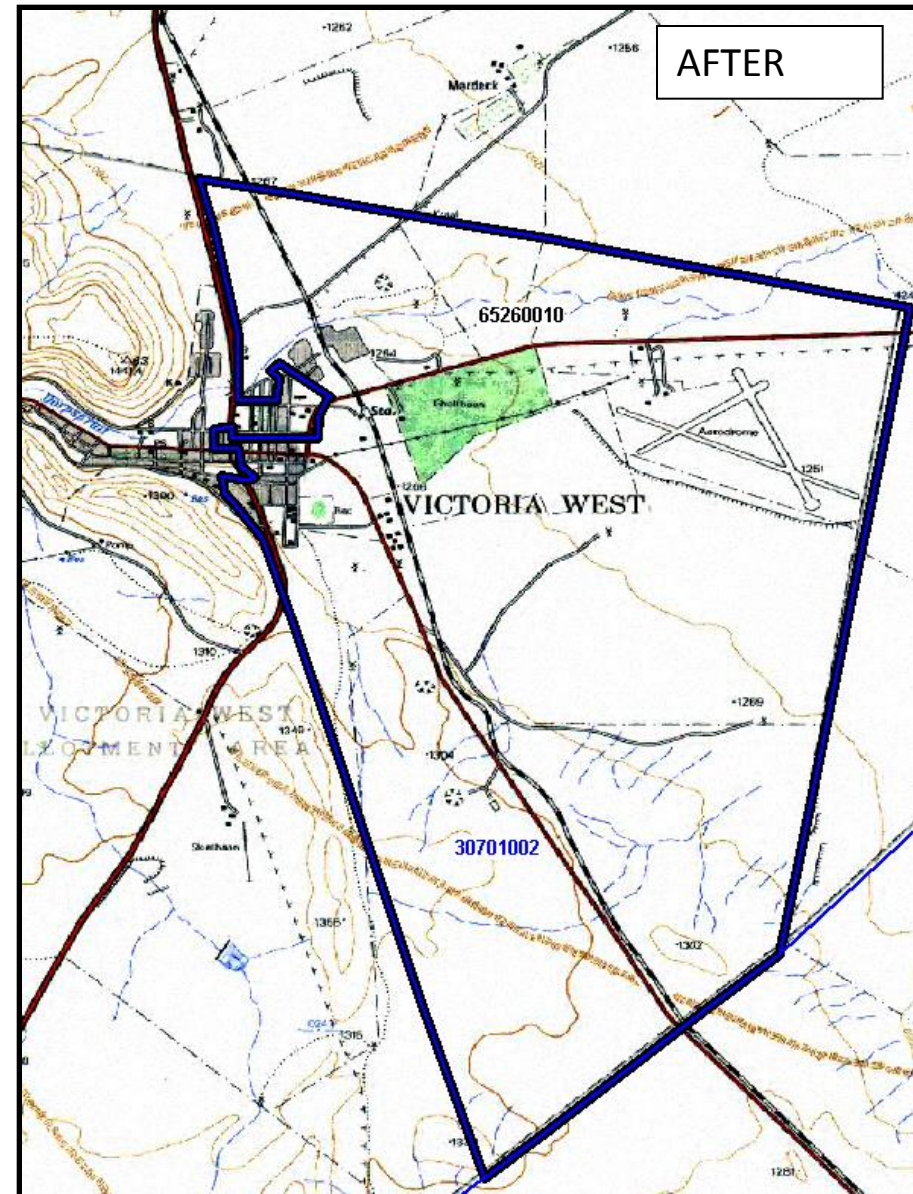
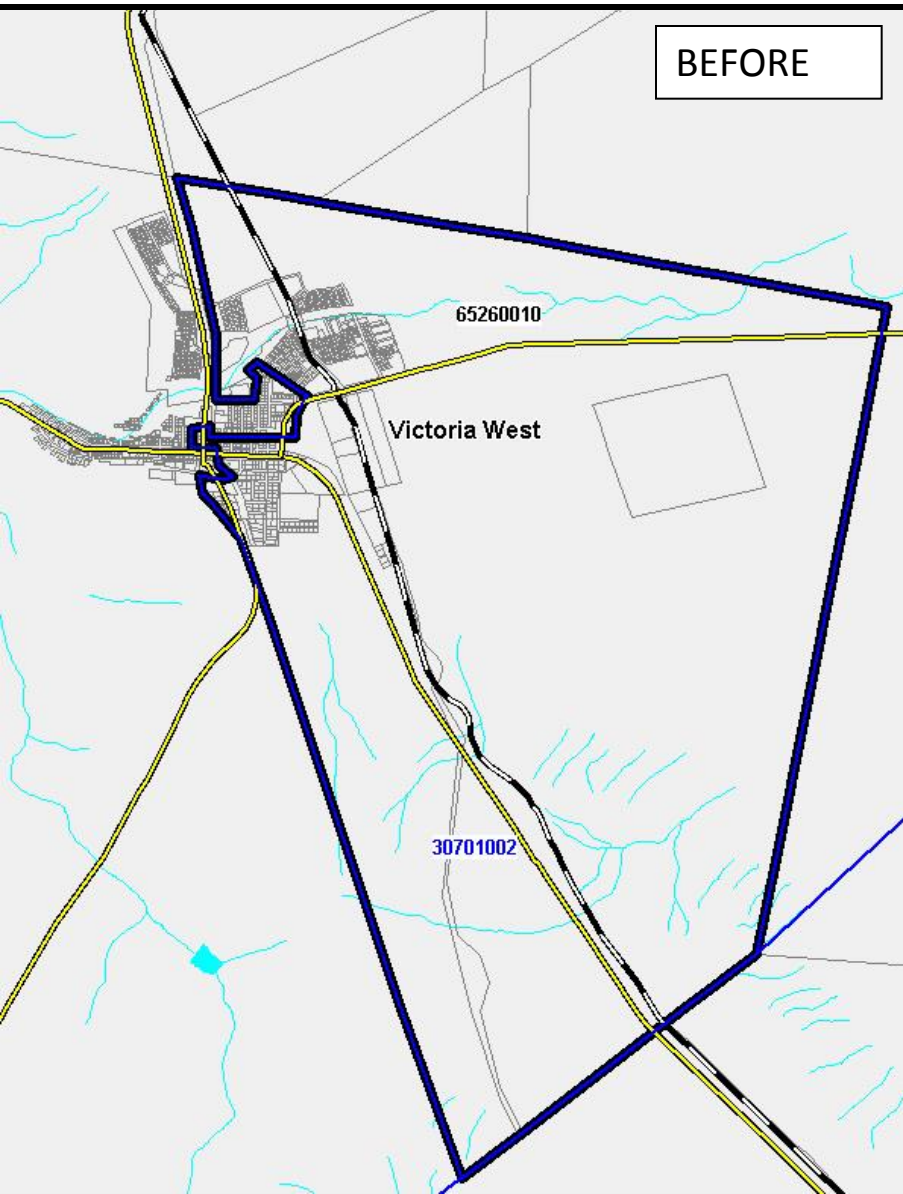
## NO GIS: Limited geospatial data for election management



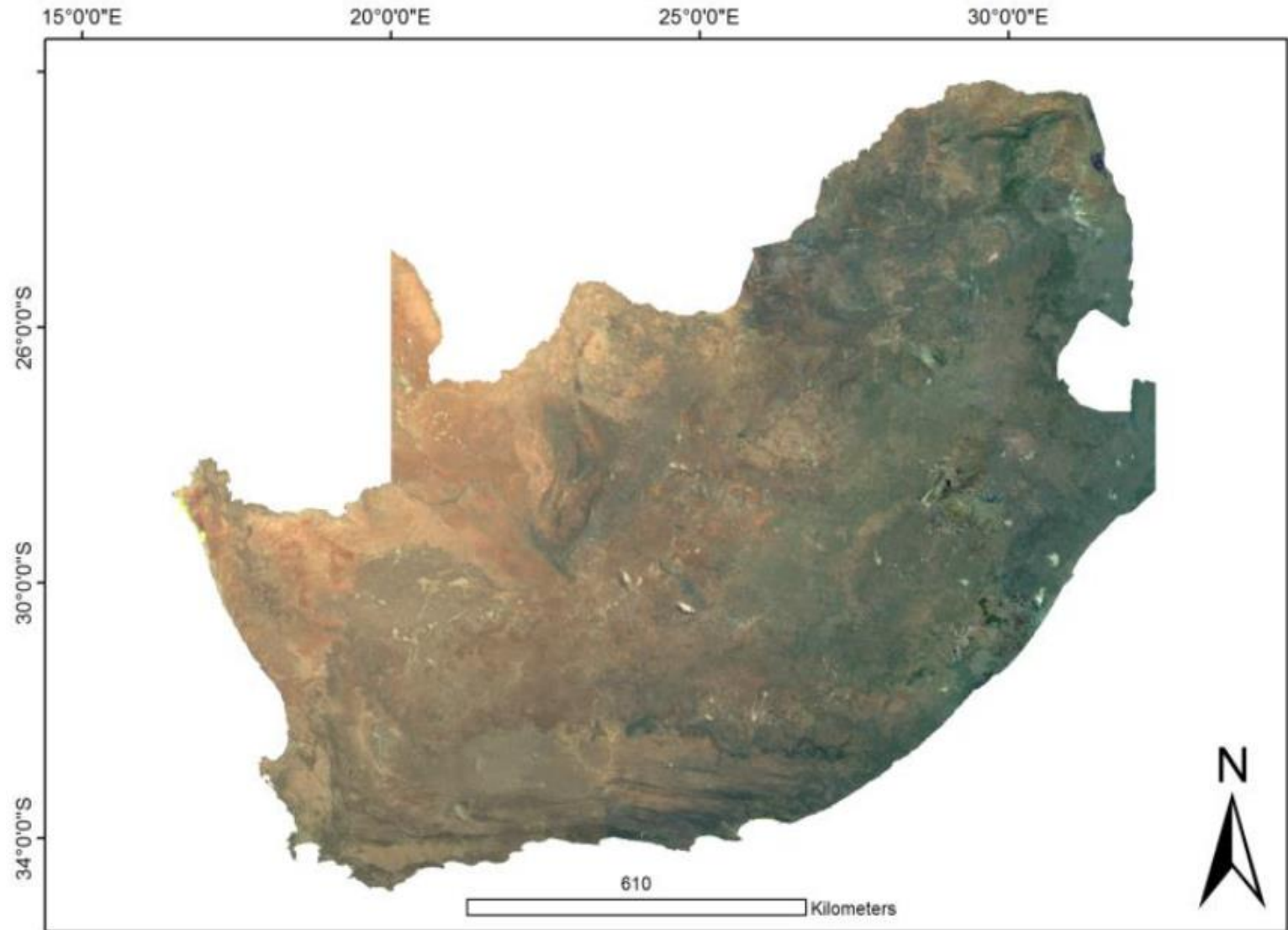
Lack of an effective, coordinated, and integrated geographic information led to challenges in the 1994 Election.



# From less comprehensive vector, to toposheets, to patchy b/w/colour imagery to full coverage SPOT 5 mosaic

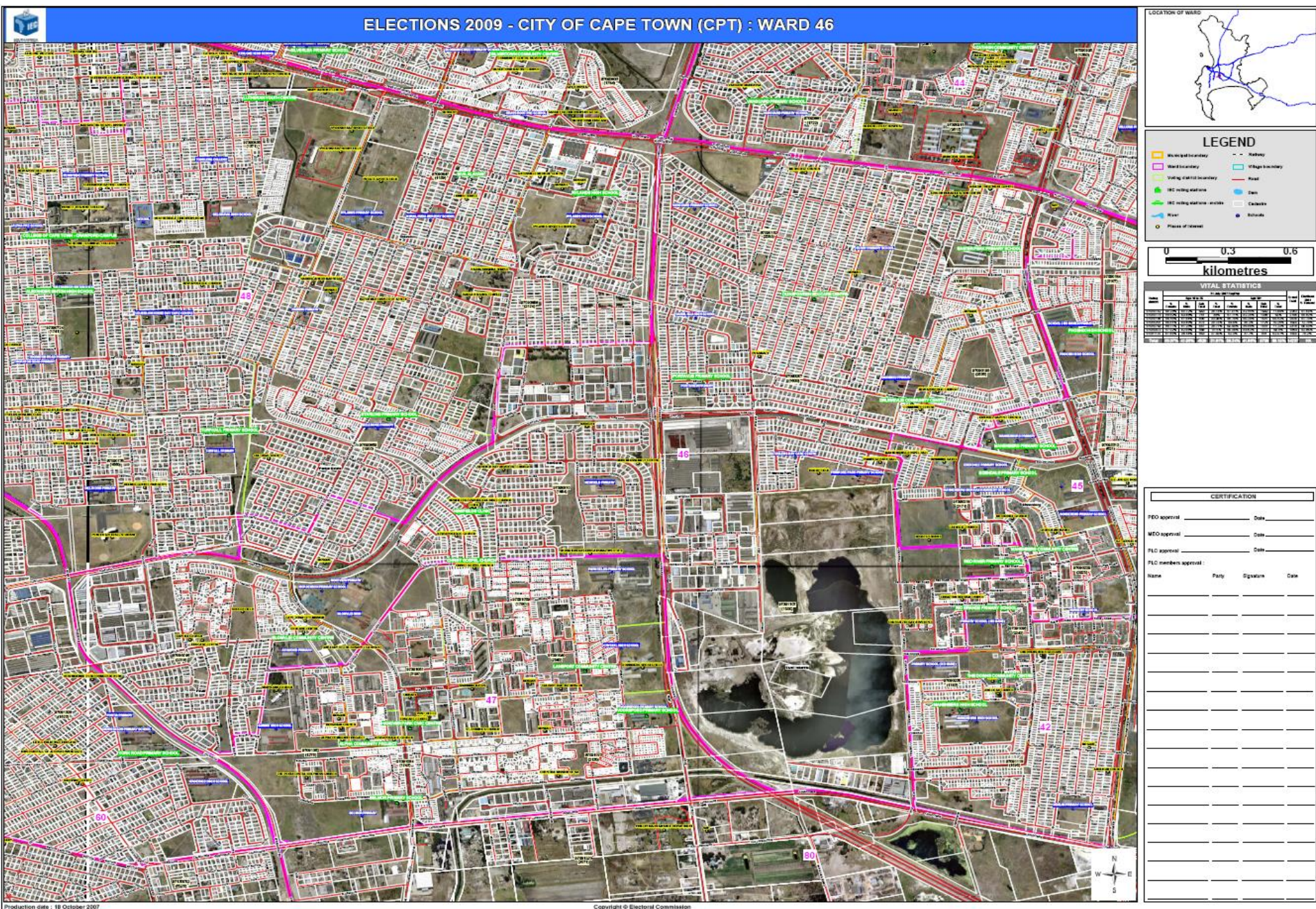


**From less comprehensive vector, to toposheets, to patchy  
b/w/colour imagery to full coverage SPOT 5 mosaic**





## Enhance geographic context on working maps





# Verify location of VS during delim

Voting Station Operations - Windows Internet Explorer

http://pilot.iec.org.za/VSO/default.aspx

Voting Station Operations

Home Voting Stations Task List Reports Administration Help Log Off

Home » Voting Stations » Capture

Voting District: 10270022 (21002002 : EC102 - Blue Crane Route [Somerset East])

Map

Voting Station Location

Voting station is inside the voting district

Back Next

Map Geolmage Hybrid

Layer Control

- ☒ Active
- ☐ Inactive
- ☒ Proposed

1 mi

2 km

© Independent Electoral Commission

Local intranet | Protected Mode: Off

100%



## Verify location of VS during delim



## Voting Station Operations

[Home](#) [Voting Stations](#) [Task List](#) ▶ [Reports](#) [Administration](#) ▶ [Help](#) ▶ [Log Off](#)

[Home](#) » [Voting Stations](#) » [Capture](#)

**Voting District: 76321223 (LIM352 - Aganang [Moletji/Matlala])**

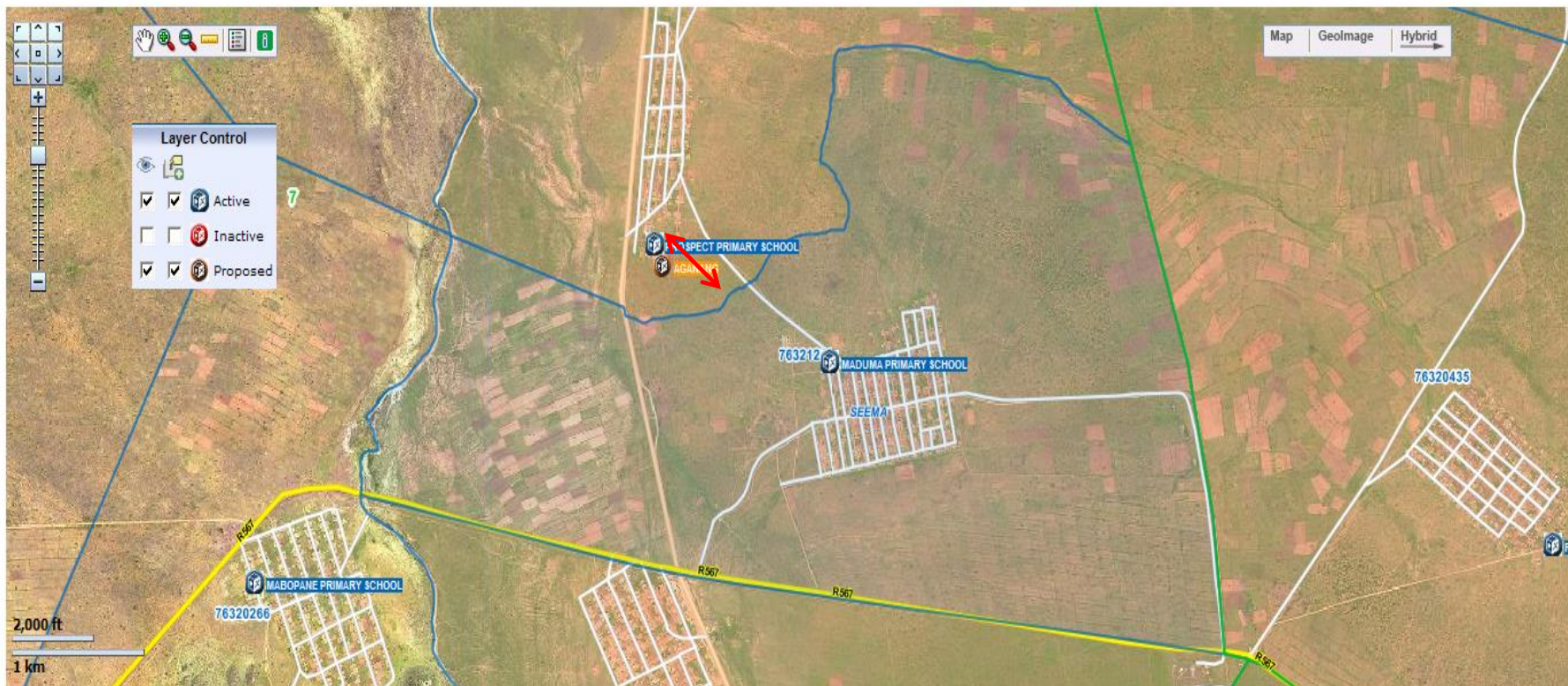
### Map

### Voting Station Location

Voting station is outside the ward

[Back](#)

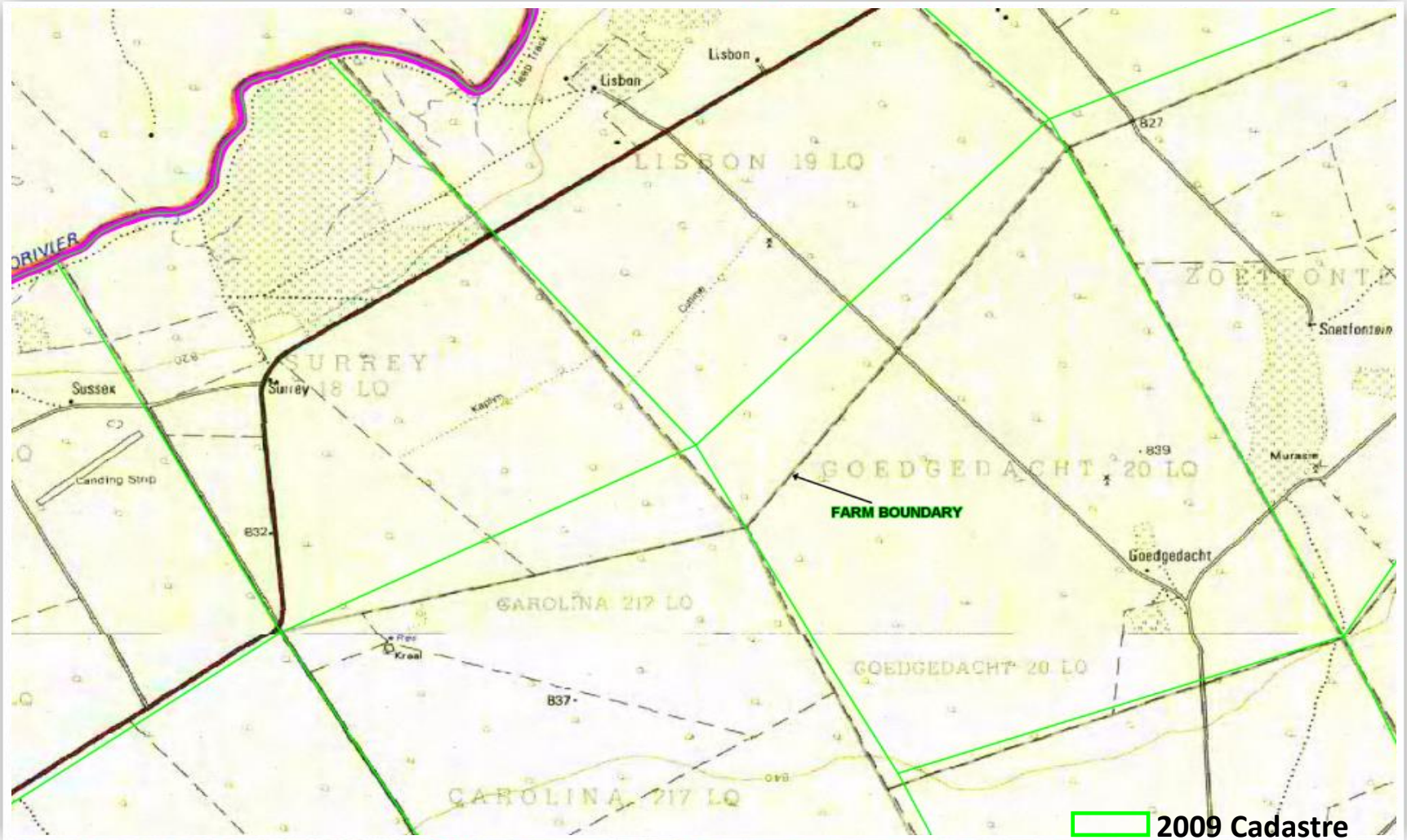
Next





# Increased QA on all data

## Accuracy Issues





# Increased QA on all data

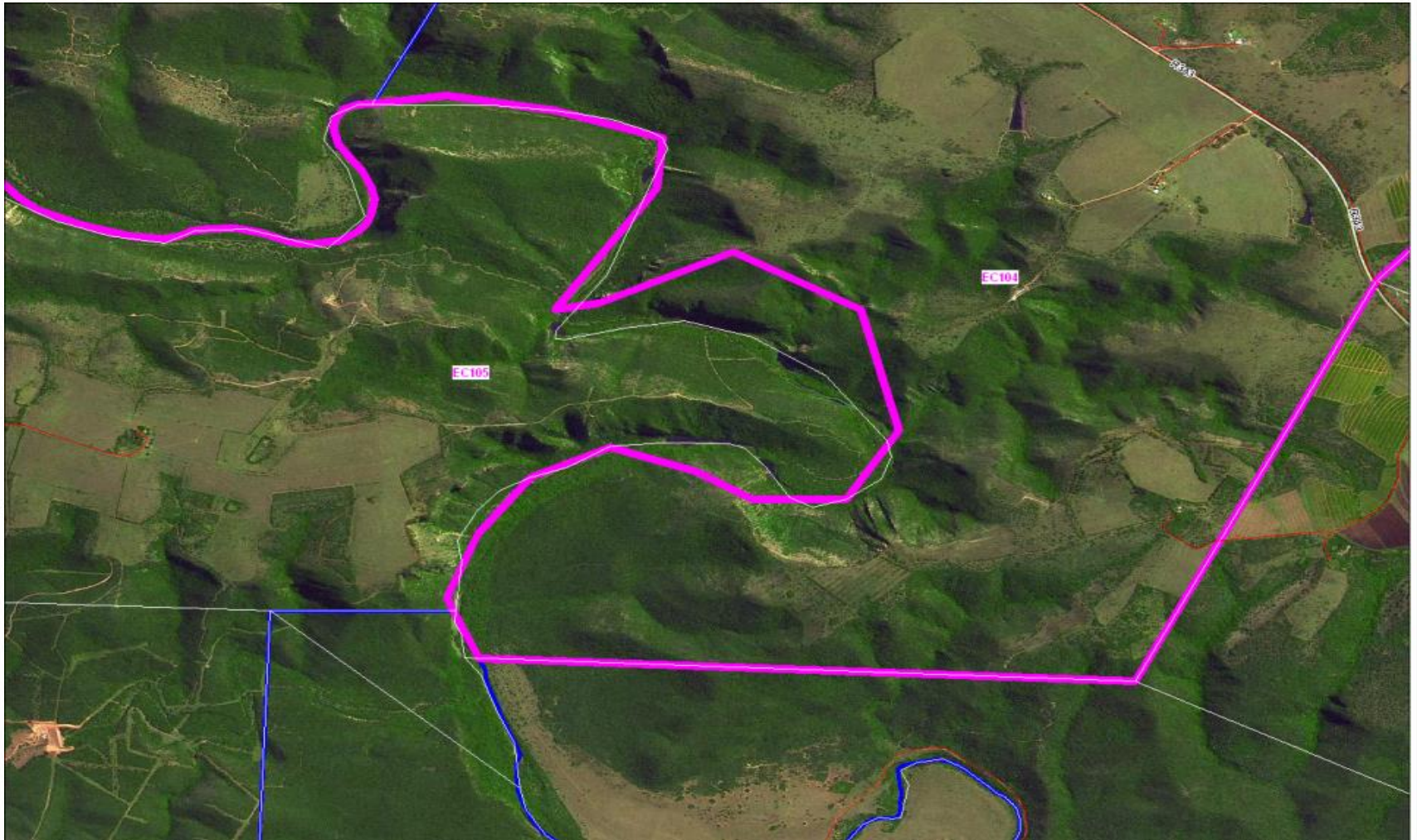
## Accuracy Issues





# Increased QA on all data

## Accuracy Issues





# Increased QA on all data

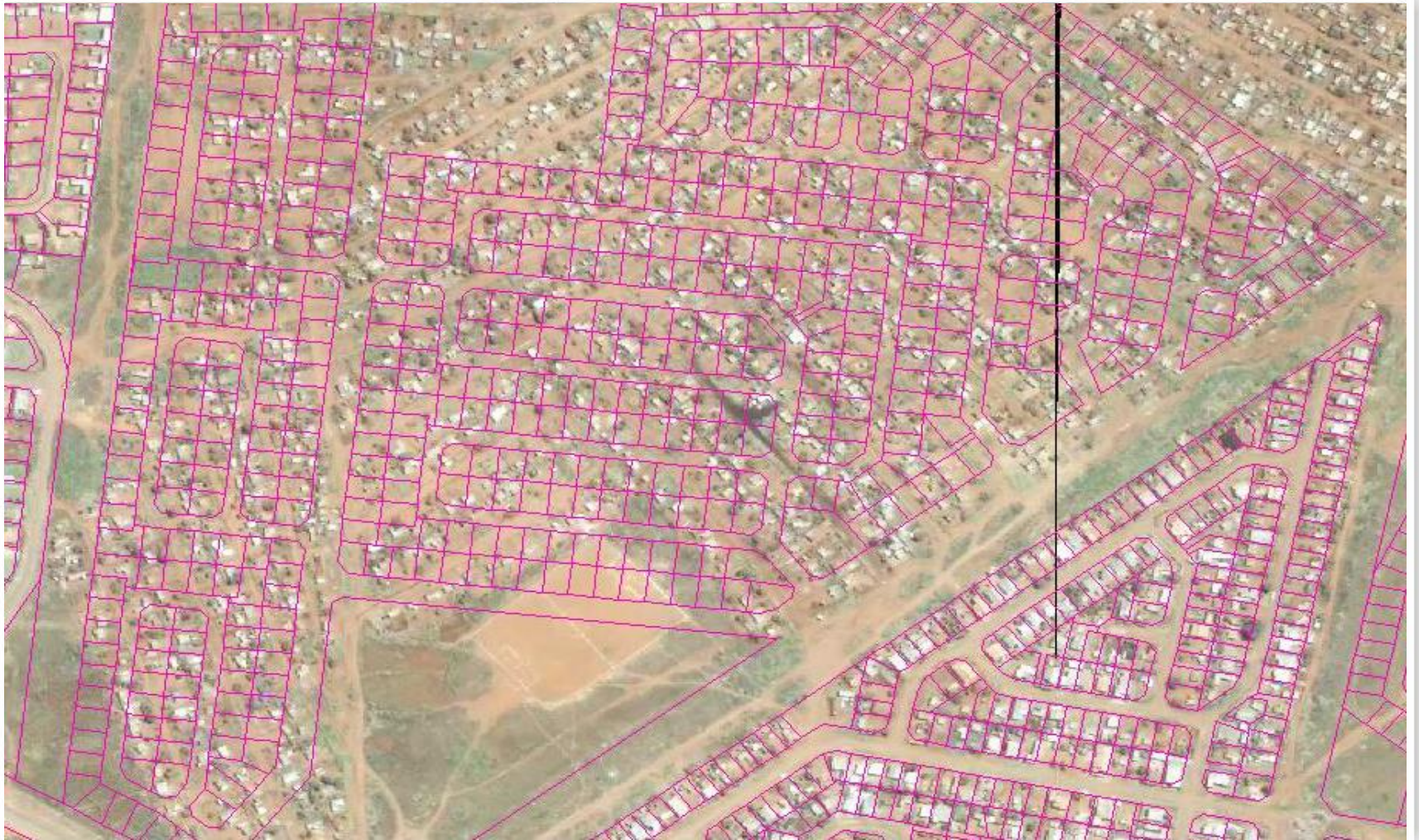
## Accuracy Issues





# Increased QA on all data

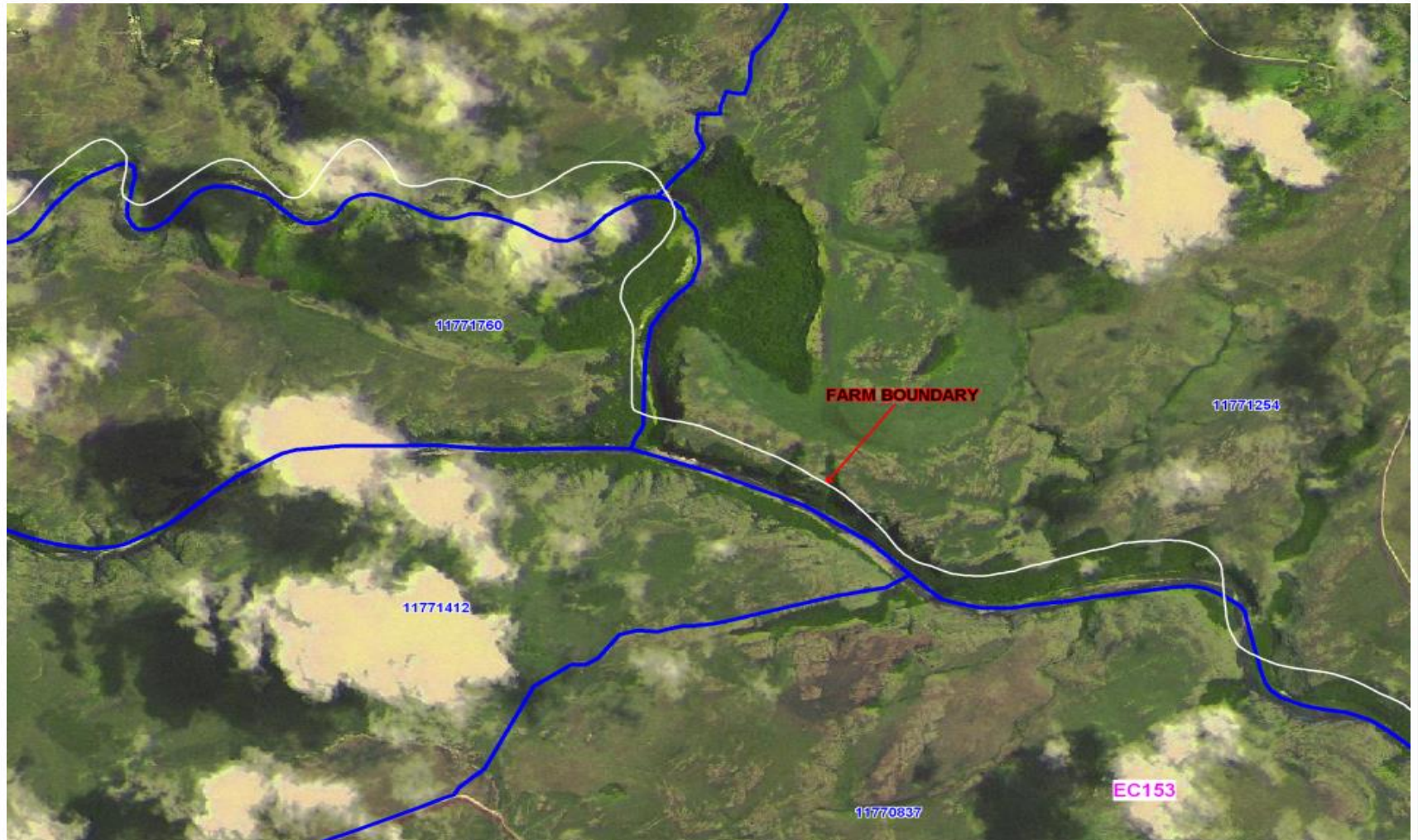
## Accuracy Issues





# Increased QA on all data

Accuracy Issues – Farm Cadastre previously used is misaligned



# Conclusion

- The call for an effective, coordinated, and integrated geographic information in preparation for the 1999 Elections led to a collaboration by the IEC, DLA and StatsSA to create the first continuous digital geographic database for the entire country;
- Subsequently new datasets such as the National Address Dictionary (NAD) were created and used to geocode voters or any other customers/topic of interest;
- Increasing availability of imagery at higher resolution (satellite and aerial) and the use of GPS technology gave us “a new set of eyes” or tools with which to examine and then enhance the quality of our datasets; and
- Finally, among others, today’s successful GIS operation requires **quality geographic data**.
- We thank SANSA and other entities such as the NGI for giving us the datasets needed to building a comprehensive and up to date basemap that facilitates effective election management.