Statistics South Africa

Keeping Pace with Development: Challenges for National Statistics Systems

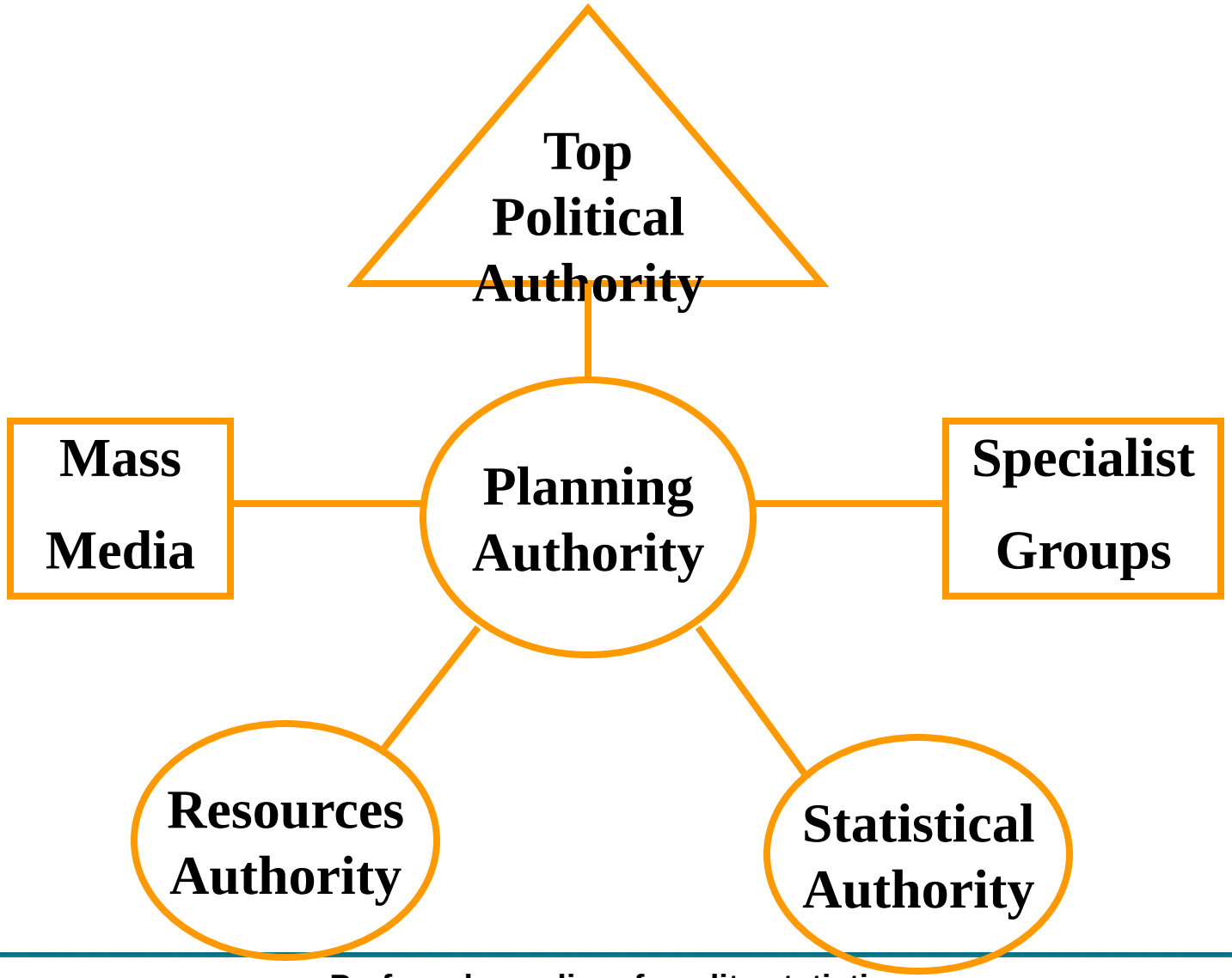
UN Statistics Commission
New York

Statistician-General South Africa
Pali Lehohla
Thursday, 3 March 2005

Contextual Challenges

- Production and Utilisation framework challenges
- Knowledge production challenges
- Autonomy challenges

Production and Utilisation Framework of Official Statistics



ELEMENTS OF THE SYSTEM

- Personnel
- Facilities
- Organisation
- Geographic organisation
- Subject matter organisation
- Functional Specialisation

- Communication Coordination
- Statistical Units
- Data Items
- Classifications
- Standards

- Policy Environment
- Governance
- Users
- Producers
- Suppliers

- Council
- Act
- Minister

Statistics South Africa

The Knowledge Society and Official Statistics

Knowledge Society:

- Is a well informed Society in fact, that should become increasingly better informed
- In a complete knowledge society, all the knowledge of the world will be:
  - available to everyone
  - available everywhere
  - available simultaneously
  - available freely

Pre-conditions

- Non-technological infrastructure should first be upgraded
  - Literacy
  - Promotion of use
  - Promotion of access
  - Basic freedoms

Forms of Knowledge

Knowledge as information

- Semantic form and irrespective of empirical validity or pragmatic relevance

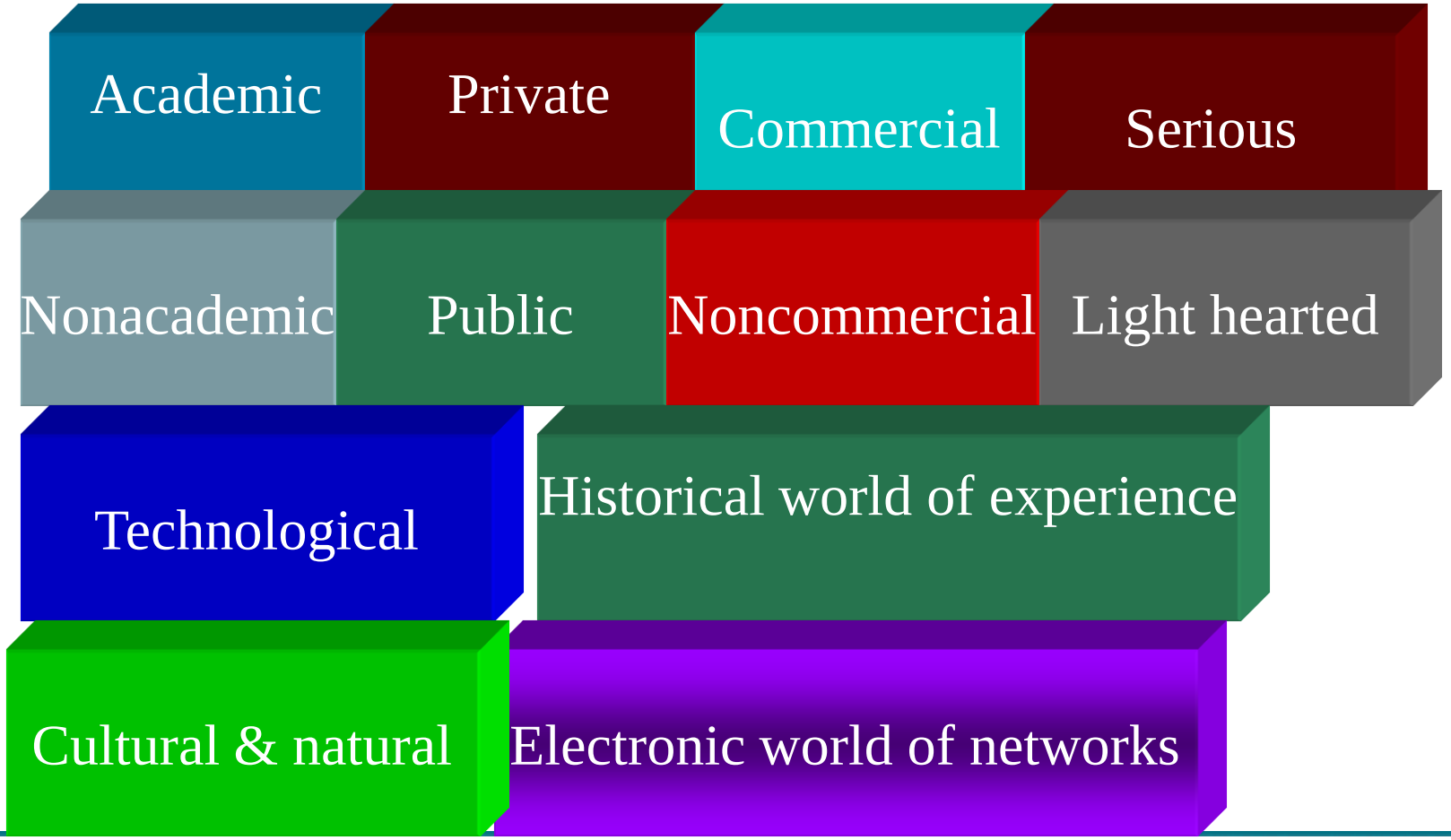
Knowledge as understanding

- Scientific knowledge as opposed to trivia in entertainment even amateur epistemology & public relations maneuvers

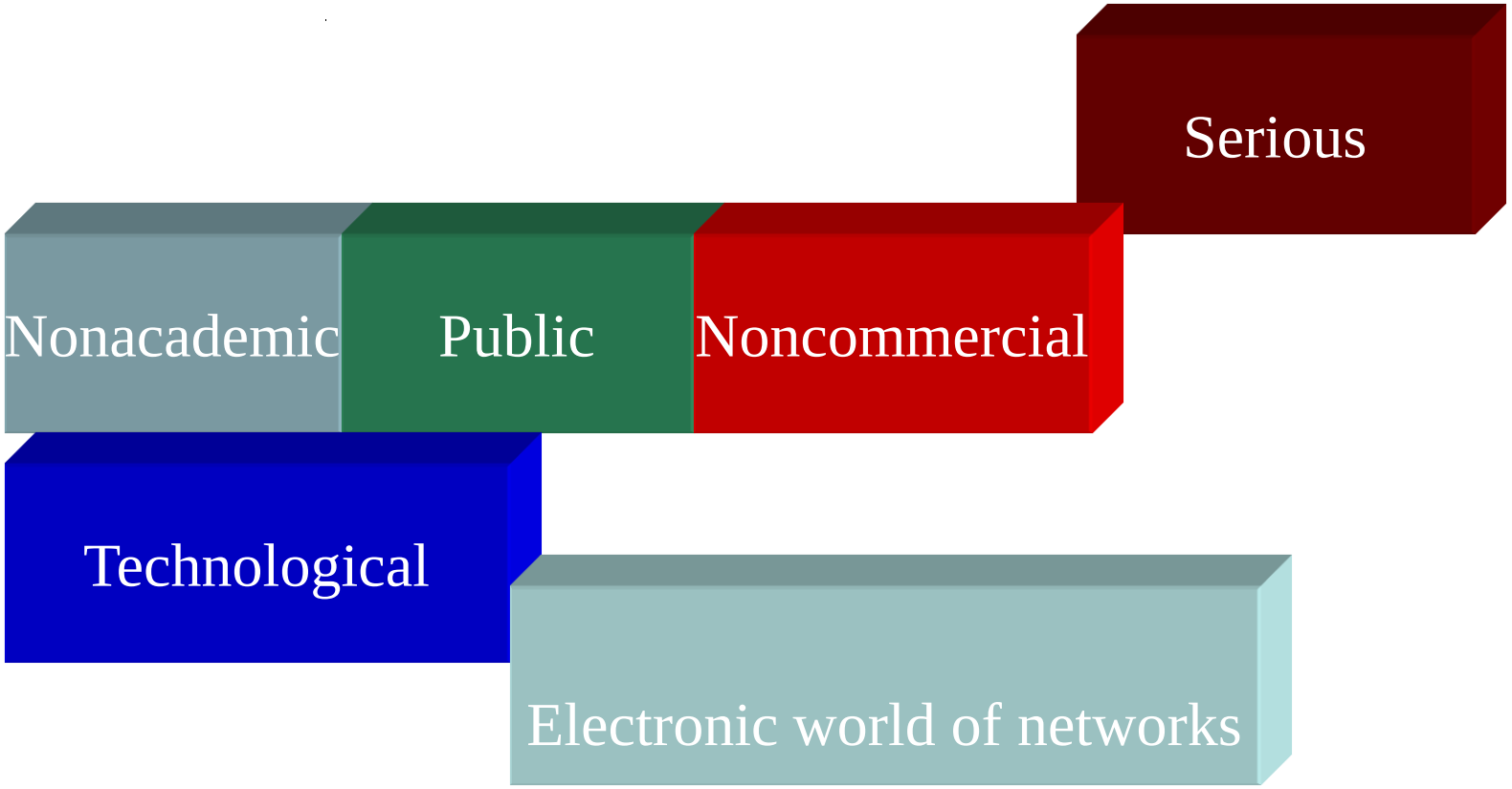
Knowledge as insight, competence and authority

- selected, activated and applied: implying applying specific rules of preference and creating added value (Bhor & Einstein)

Cognitive Map of the knowledge society as an aid to orientation

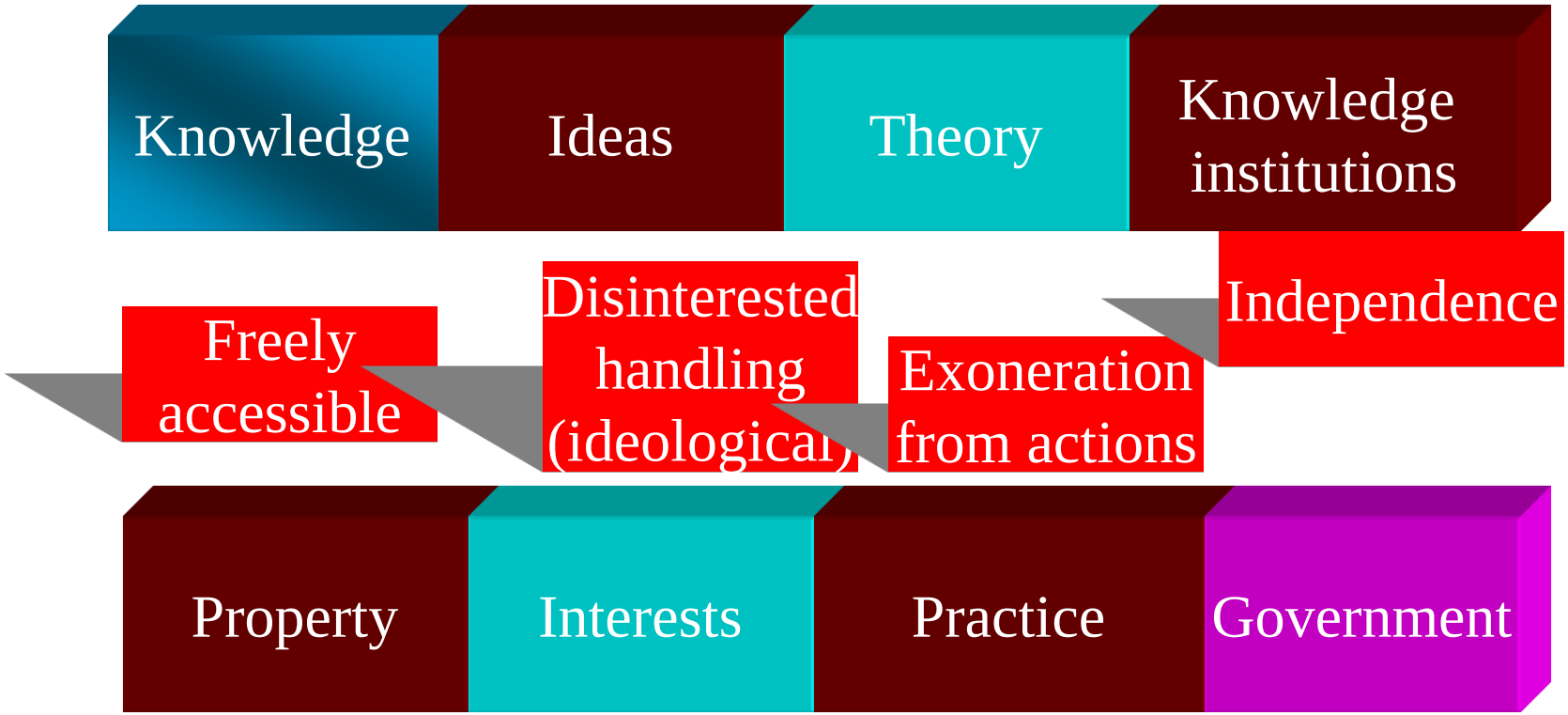


Cognitive Map of the knowledge society for Official Statistics



Social Division of knowledge from an official statistics perspective

Order Policy of Knowledge & the Need For Separation



Positive Contributions of Official Statistics

- Basic information on society
- Informational service as arise from legal rulings
- Raising information levels for the information society
- Provides orientation aids
- Supplement other info services
- Knowledge base for counter information
- Statistical advice for government

Knowledge Deficits of Official Statistics

- Unavoidable knowledge gaps e.g. the future
- Intentional ignorance e.g. where there should be stats but none exist
- Limited partial knowledge
- Legalised knowledge errors e.g, definitions & standards poverty
- Inherent limits of statistical information: By its nature it can't deliver insights

Handlers of information & Risk Profile

- **Blind** (mailman not allowed to read)
- **Discreet** (butler knows but no comment)
- **Anonymous** (statistician notes mass data)
- **Mechanical** (politicians)
- **Participatory** (scientist excited by theory)
- **Interventionist** (knowledge = power)

Competency Profile & Risk Management

no insight understanding intervention

insight understanding **no** intervention

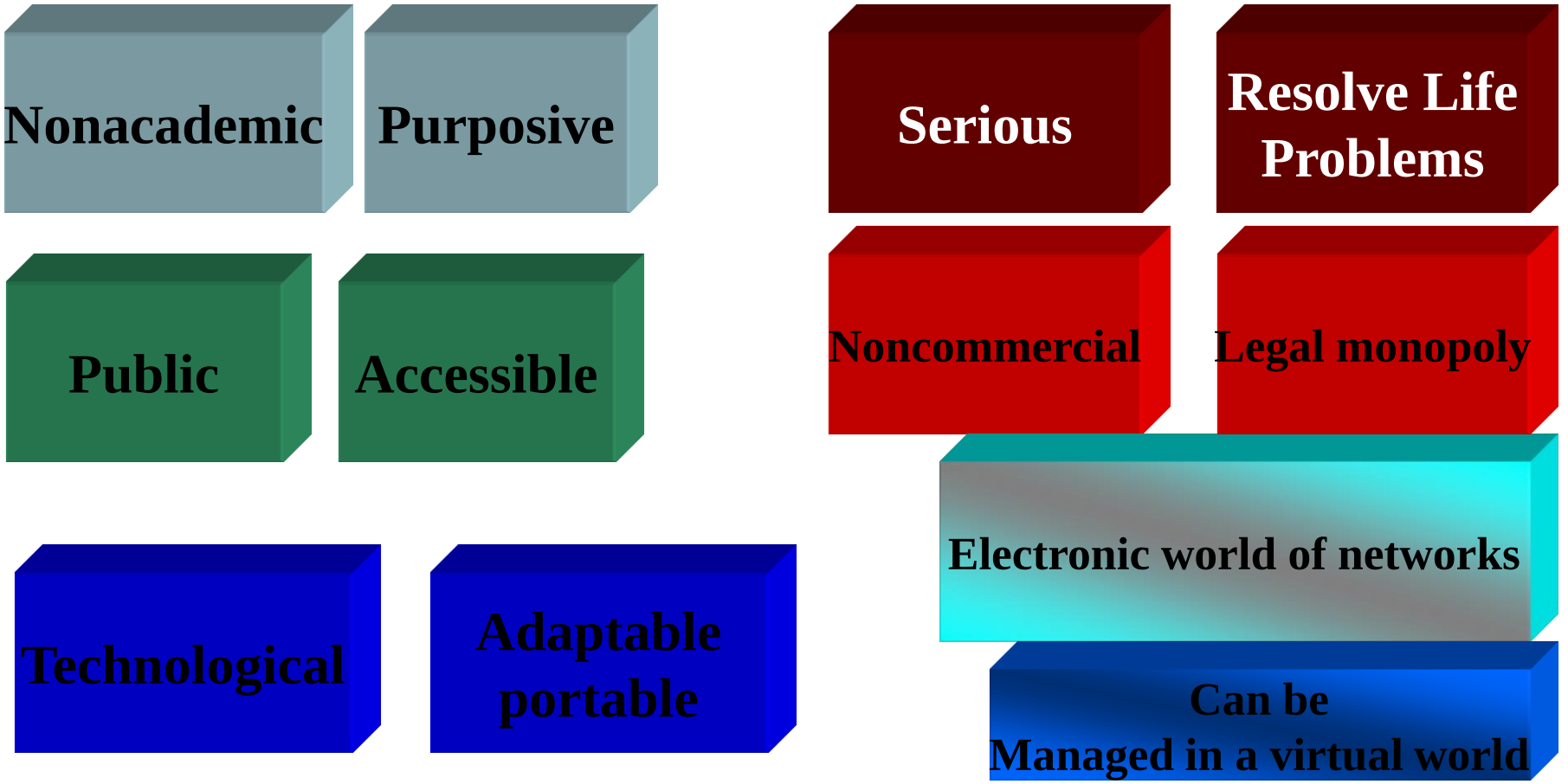
Understanding **no** insight intervention

insight intervention **no** understanding

insight understanding **no** intervention

insight understanding & intervention

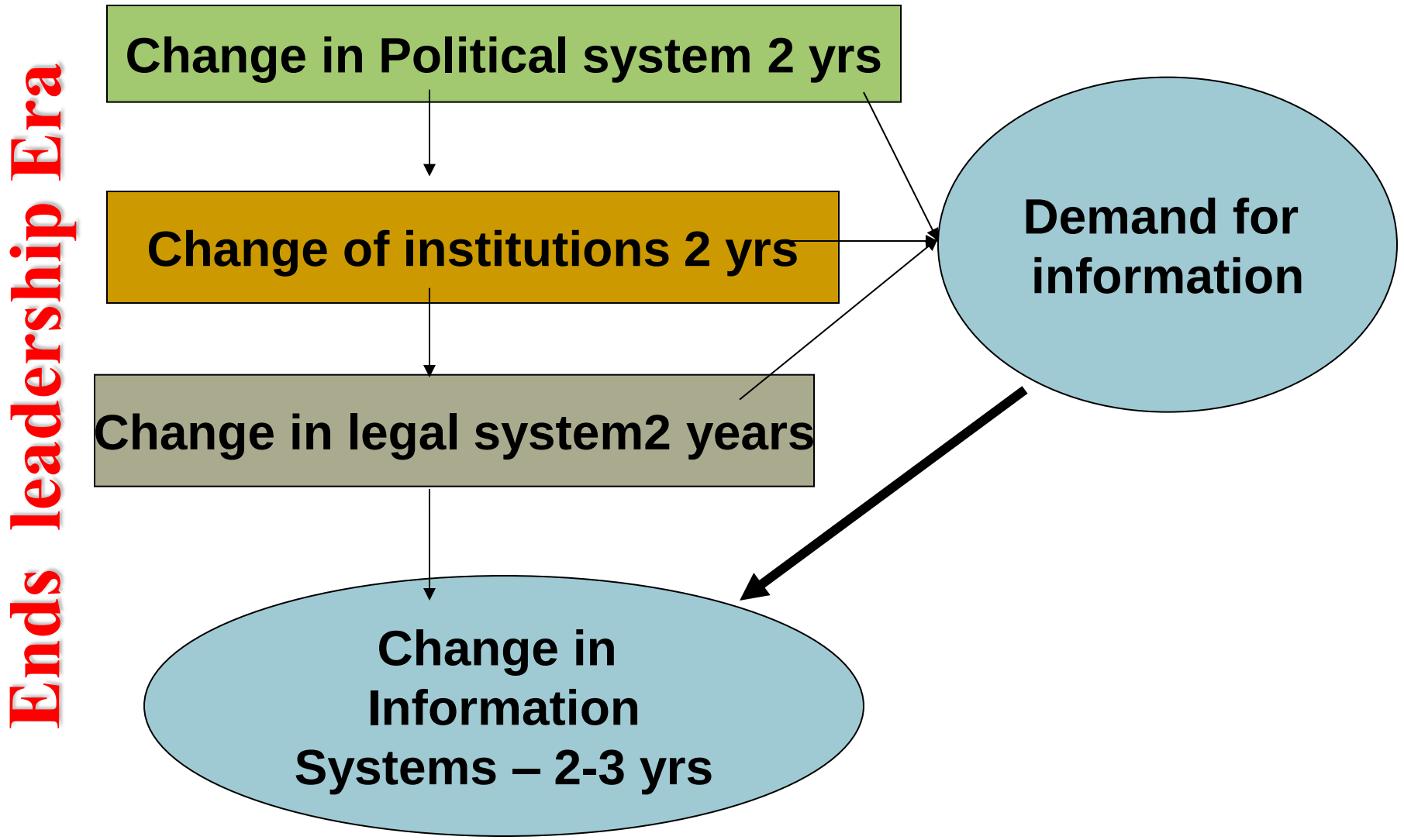
What Makes Statistics Useful



Transition Countries

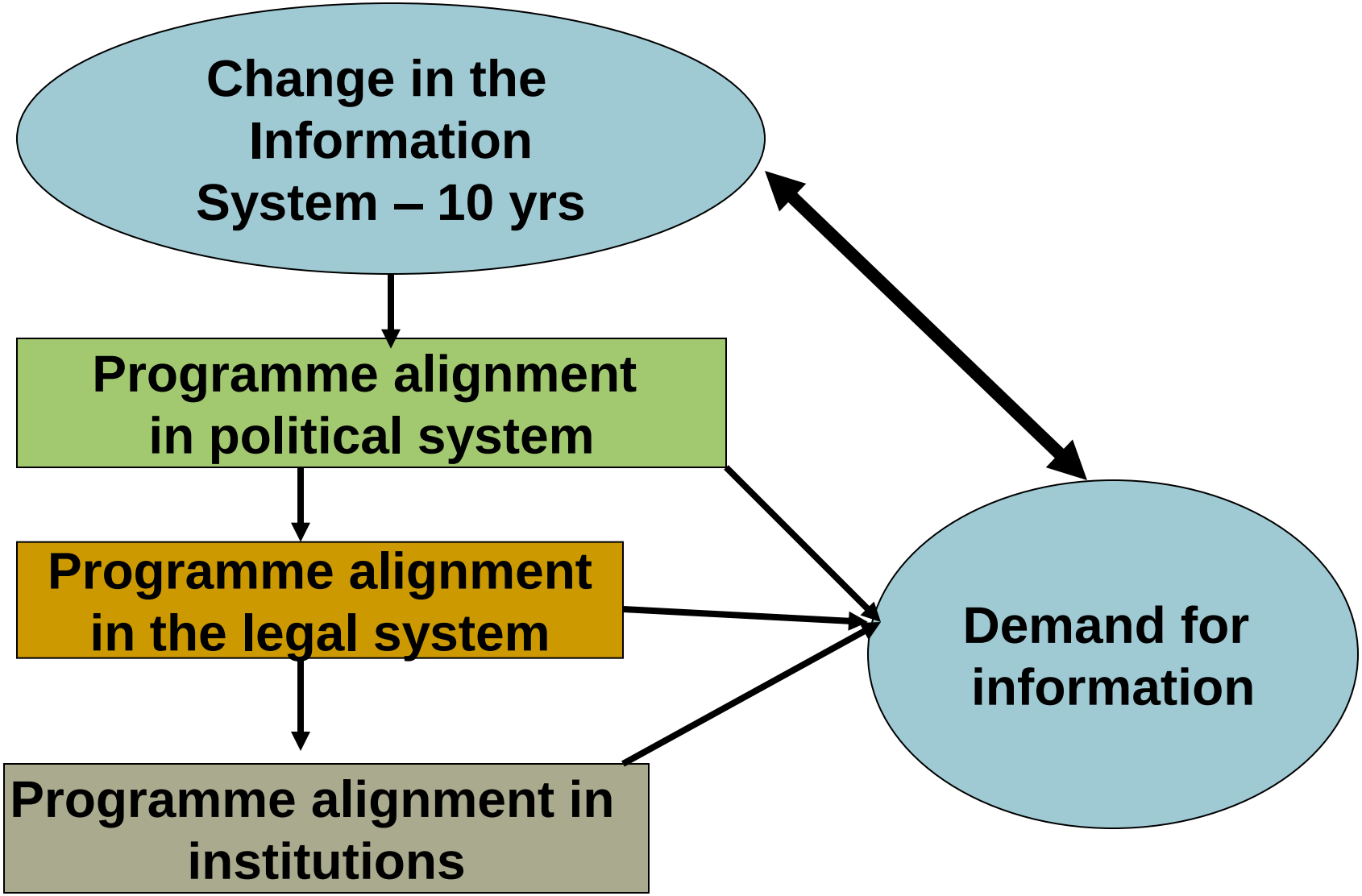
- Superstructure changes
- Economy and social relations information systems
- Construction out of destruction

Transition Countries



Transition Countries

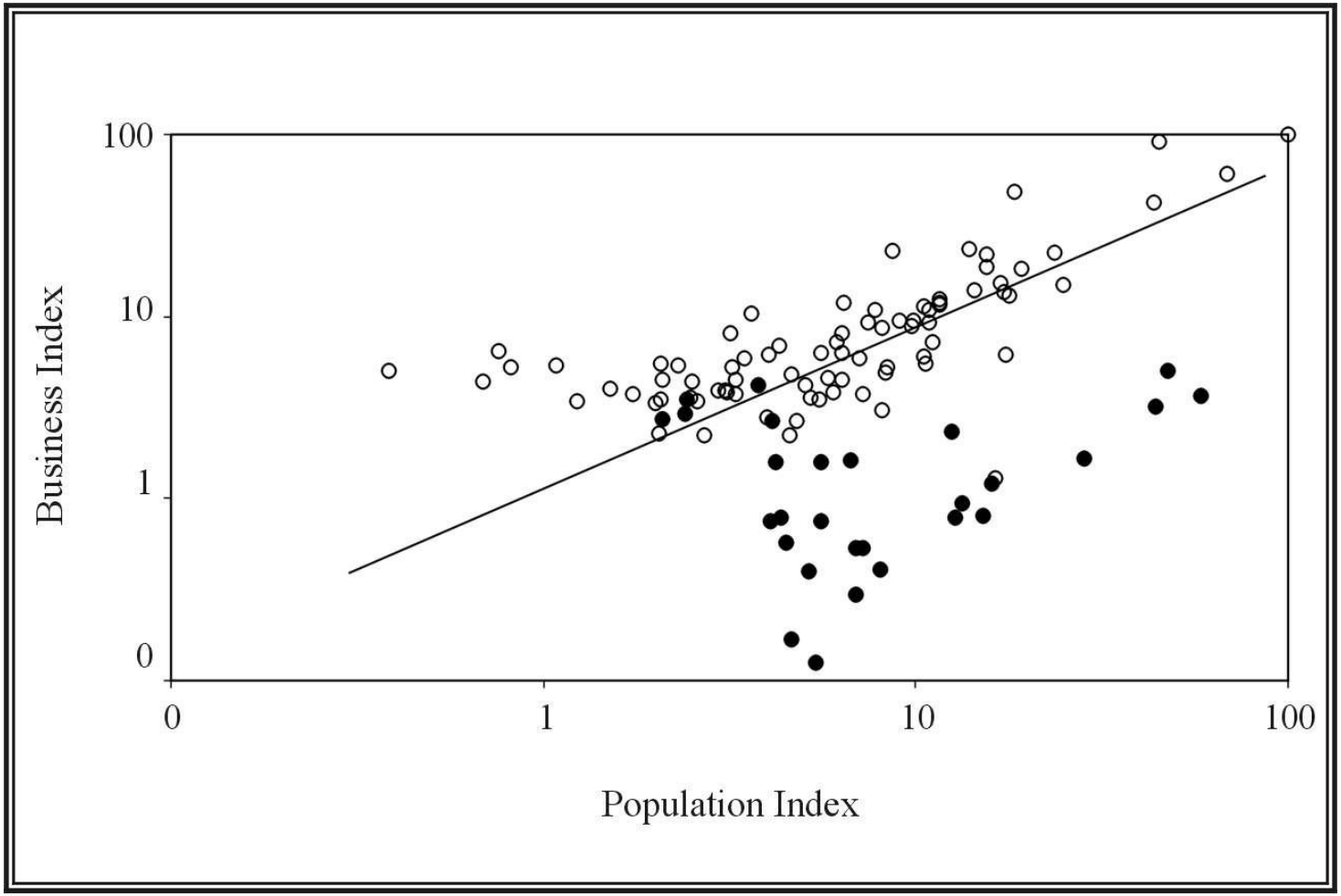
Means Leadership Era



Content Challenges

- Regional Statistics informing development
- Regional Statistics informing constituency delimitation
- Statistics informing poverty
- Improving Economic Statistics
- Competency and errors
- Public trust

Population size vs UFI of former White and Black cities in SA, 1996

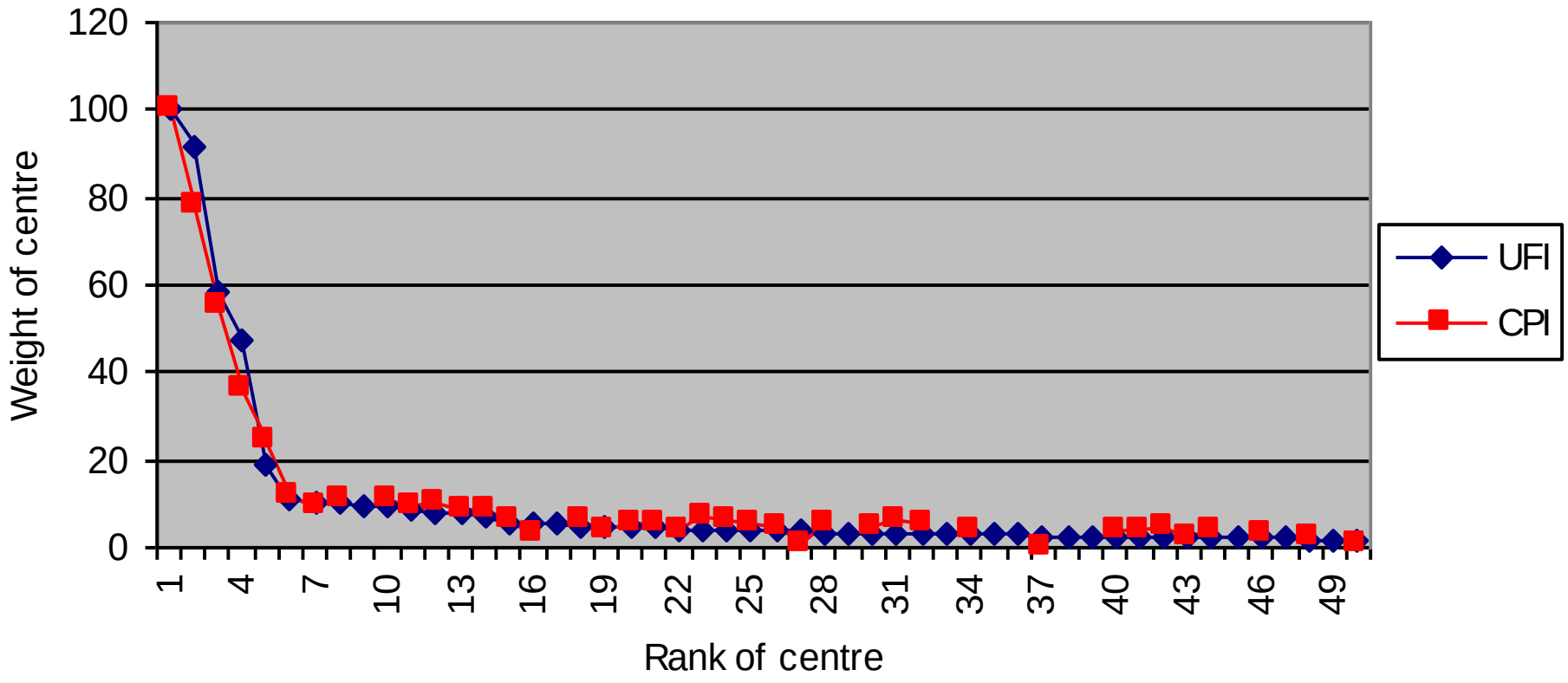


Source: Own calculations, 1996

CPI & UFI of the first 50 centres

Former Name	New Municipal Name	UFI-2003	CPI-1996
Johannesburg	City of Johannesburg	100.00	100.00
Kaapstad	City of Cape Town	91.26	78.12
Durban	eThekwini Metropolitan	58.29	55.36
Pretoria Sentraal	City of Tshwane	47.06	36.60
Port Elizabeth	Nelson Mandela Metropolitan	19.11	24.37
Pinetown		10.74	12.15
Germiston		10.54	9.75
Bloemfontein	Mangaung Municipality	10.38	10.66
Pietermaritzburg	The Msunduzi Municipality	9.19	
Roodepoort		9.18	11.33
Kemptonpark		8.43	9.16
East London	Buffalo City	7.97	10.62
Benoni		7.57	8.73
Boksburg		7.47	8.82
Alberton		5.81	6.57
Somerset West		5.68	3.19
Midrand	Midrand	5.45	
Vereeniging	Emfuleni Municipality	4.90	6.21
Nelspruit	Mbombela	4.86	4.01
George	George Municipality	4.73	5.28
Klerksdorp	City Council of Klerksdorp	4.41	5.28
Stellenbosch	Stellenbosch Municipality	4.28	3.59
Bellville		4.18	6.84
Kimberley	Sol Plaatje Municipality	3.84	6.68
Springs		3.84	5.29
Rustenburg	Rustenburg Municipality	3.79	4.78
Polokwane	Polokwane Municipality	3.66	0.62
Vanderbijlpark	Emfuleni Municipality	3.52	5.50
Krugersdorp	Mogale City Municipality	3.39	
Witbank	Emalahleni	3.34	4.78
Welkom	Matjhabeng Municipality	3.27	6.17
Paarl	Drakenstein Municipality	3.24	5.22
Empangeni		3.08	
Potchefstroom	Potchefstroom Municipality	2.99	3.68
Tzaneen	Greater Tzaneen Municipality	2.82	
Richards Bay	uMhlathuze Municipality	2.80	
Newcastle	Newcastle Municipality	2.62	0.29
Strand		2.57	
Wellington		2.46	
Brakpan		2.39	3.90
Middelburg	Middelburg	2.38	3.78
Uitenhage		2.20	4.73
Knysna	Knysna Municipality	2.19	2.43
Worcester	Breede Valley Municipality	2.15	3.76
Port Shepstone	Hibiscus Coast Municipality	2.14	
Mossel Bay	Mossel Bay Municipality	2.08	2.81
Loskop	Imbabazane Municipality	2.07	
Brits	Municipality of Madibeng	1.95	2.14
Greater Hermanus	Overstrand Municipality	1.78	
Ladysmith	Emnambithi/Ladysmith Munic	1.72	0.41

The SA urban rank-size – 1996, 2003



Overlap between districts and catchment areas - Best fit

	Km²			
Munisipal district	Municipal District Area	Poligon Area	% Poligon Area overlap with Mun. District Area	% Mun District Area overlap with Polygon area
Mossel Bay	2,008	1,946	88%	90%
Elundini	5,364	5,688	81%	77%
Mbizana	2,414	2,274	83%	89%
Ditsobotla	6,477	6,201	84%	87%
Setsoto	5,975	6,814	88%	77%
Zeerust	7,206	6,225	82%	95%
Richtersveld	9,684	9,298	91%	95%
Matzikama	5,544	6,710	85%	70%
City of Cape Town	2,500	2,377	83%	88%
Langeberg	5,733	6,255	92%	85%
Senqu	6,777	7,223	90%	84%
			86%	

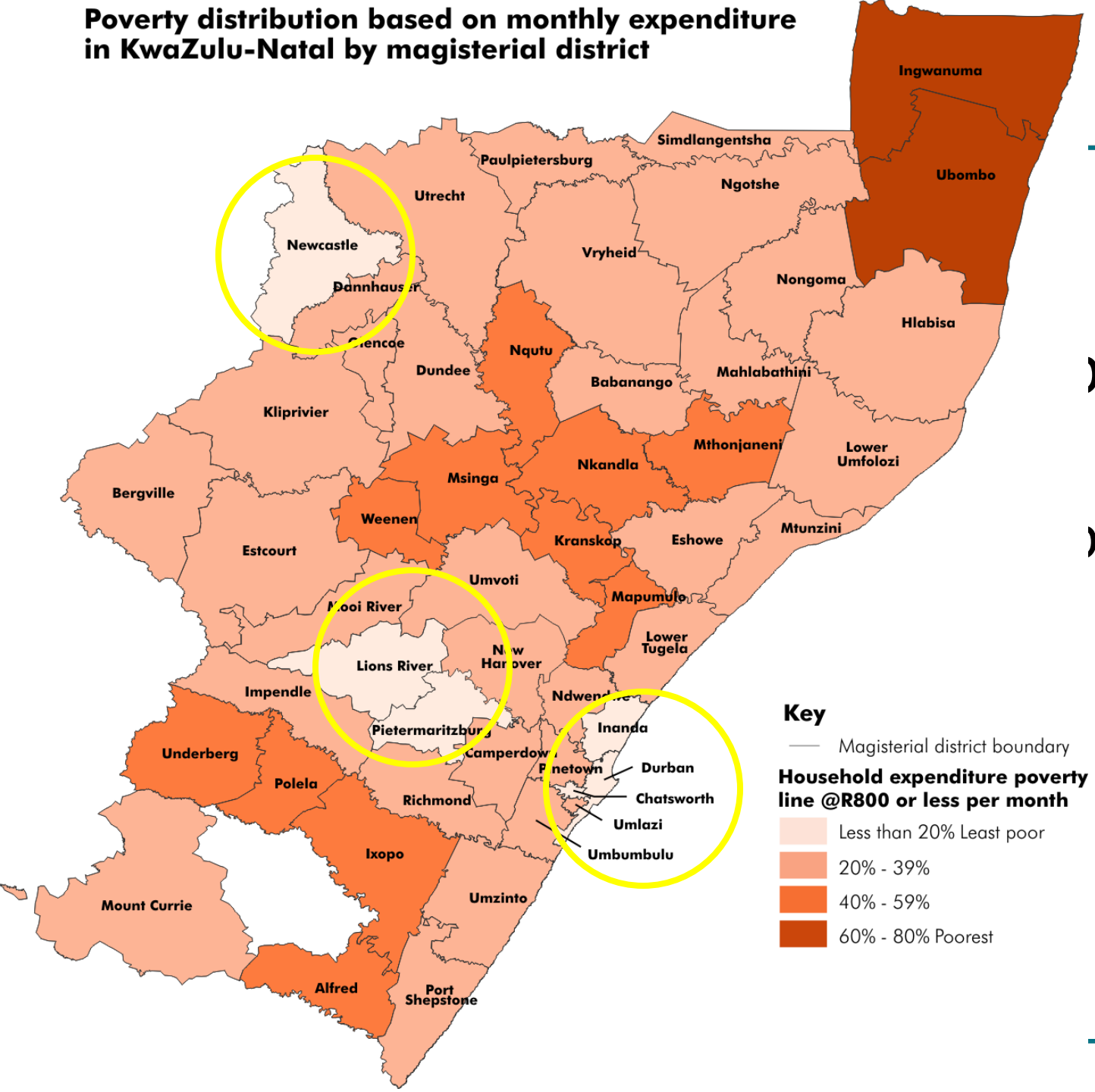
Overlap between districts and catchment areas – Medium fit

	Km²			
Munisipal district	Municipal District Area	Poligon Area	% Poligon Area overlap with Mun. District Area	% Mun District Area overlap with Polygon area
Kareeberg	17,720	18,830	59%	55%
Blue Crane Route	9,836	7,776	57%	72%
Mohokare	8,788	5,629	63%	98%
Highveld East	2,964	1,857	49%	78%
Inkwanca	3,587	2,987	65%	78%
			59%	

Overlap between districts and catchment areas – Worst fit

	Km²			
Munisipal district	Municipal District Area	Poligon Area	% Poligon Area overlap with Mun. District Area	% Mun District Area overlap with Polygon area
Renosterberg	5536	2022	36%	99%
Central Karoo	5589	1634	29%	100%
Greater Taung	5649	2306	34%	84%
Thulamela	2,974	1,577	35%	66%
!Kheis	5,530	5,502	33%	33%
			33%	

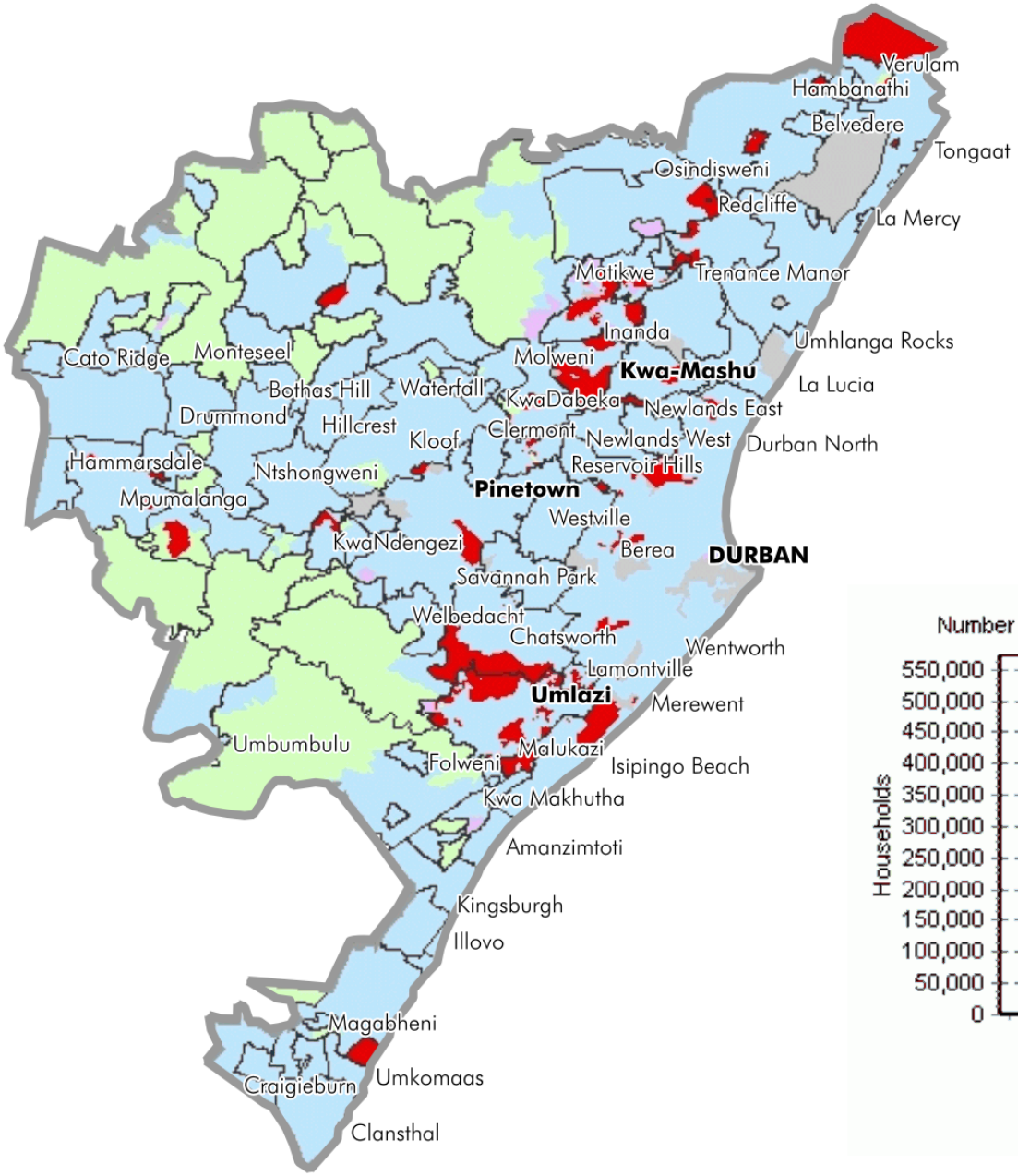
Poverty distribution based on monthly expenditure in KwaZulu-Natal by magisterial district

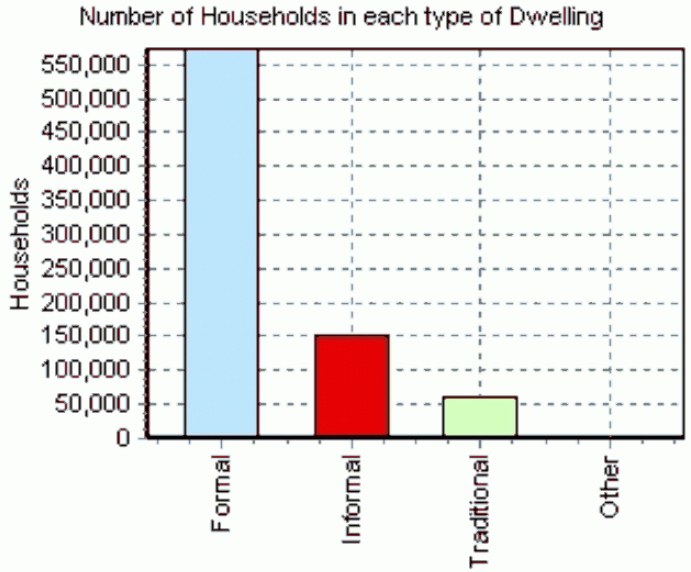


overty

overty

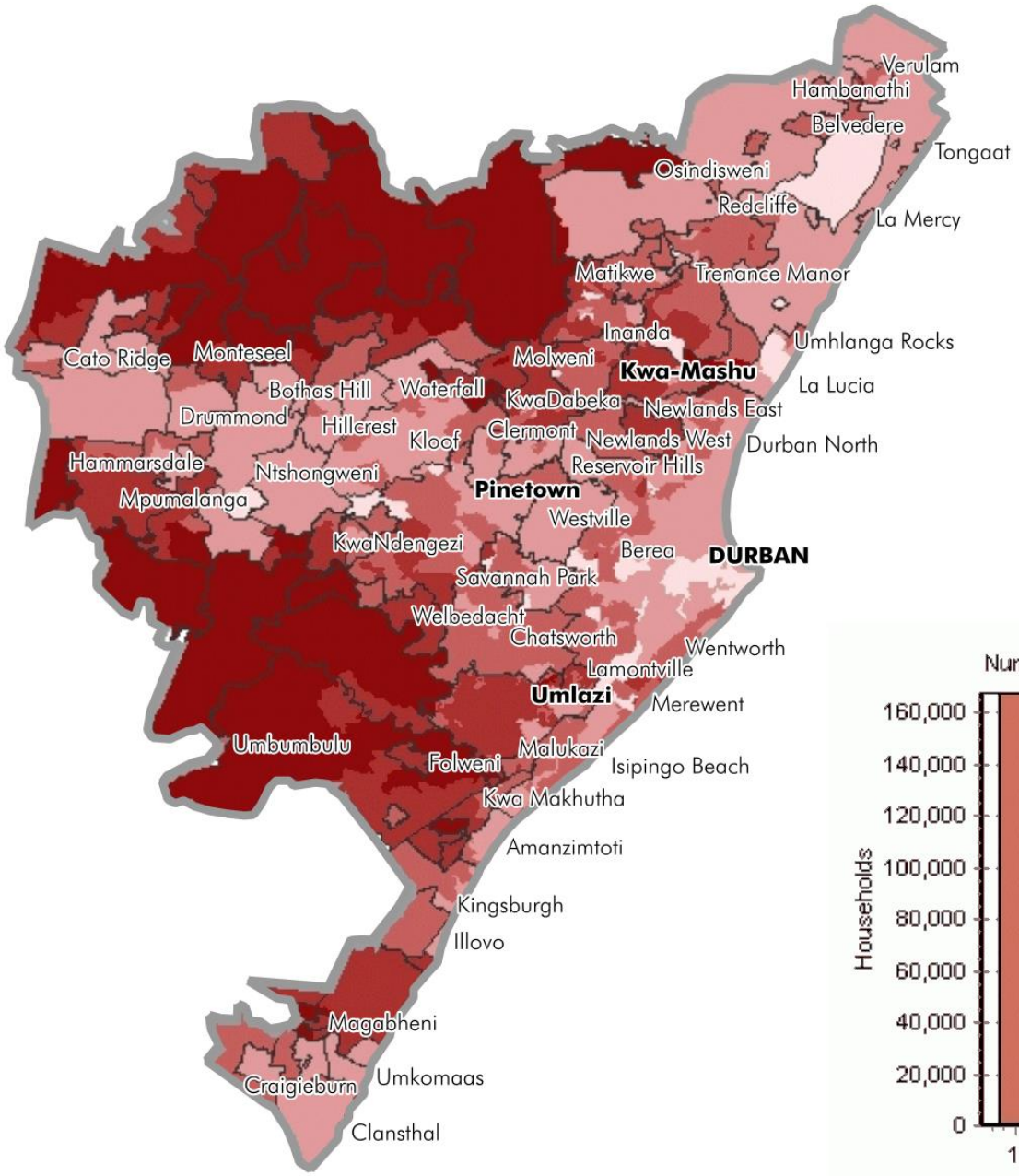
Dominant* Dwelling Type, 2001

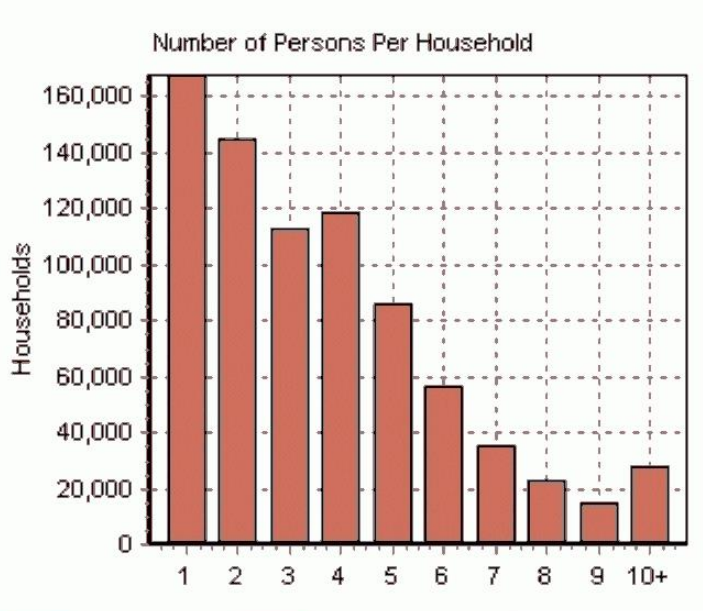




Dwelling Type Formal Informal Traditional Multiple None

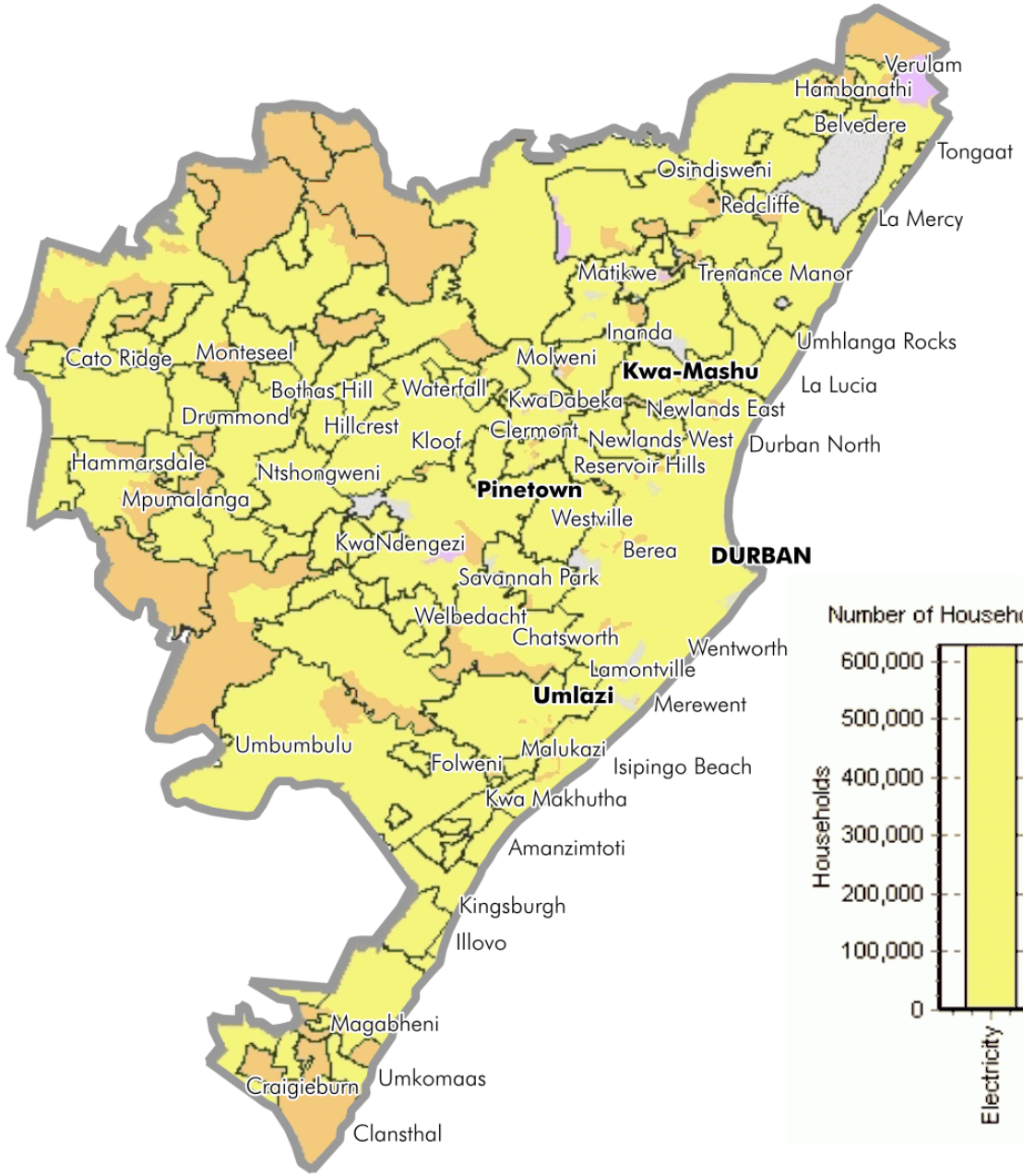
Household Size, 2001

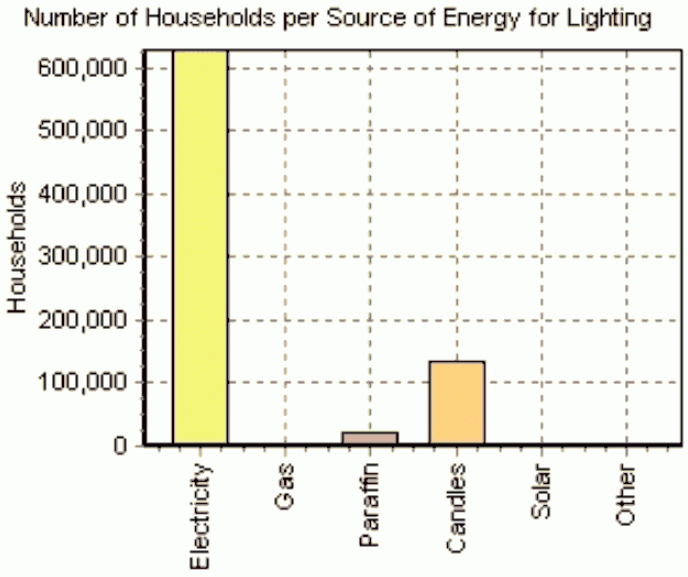




Persons per Household* 0.00 - 1.47 | 1.48 - 3.22 | 3.23 - 4.31 | 4.32 - 5.55 | 5.56 - 11

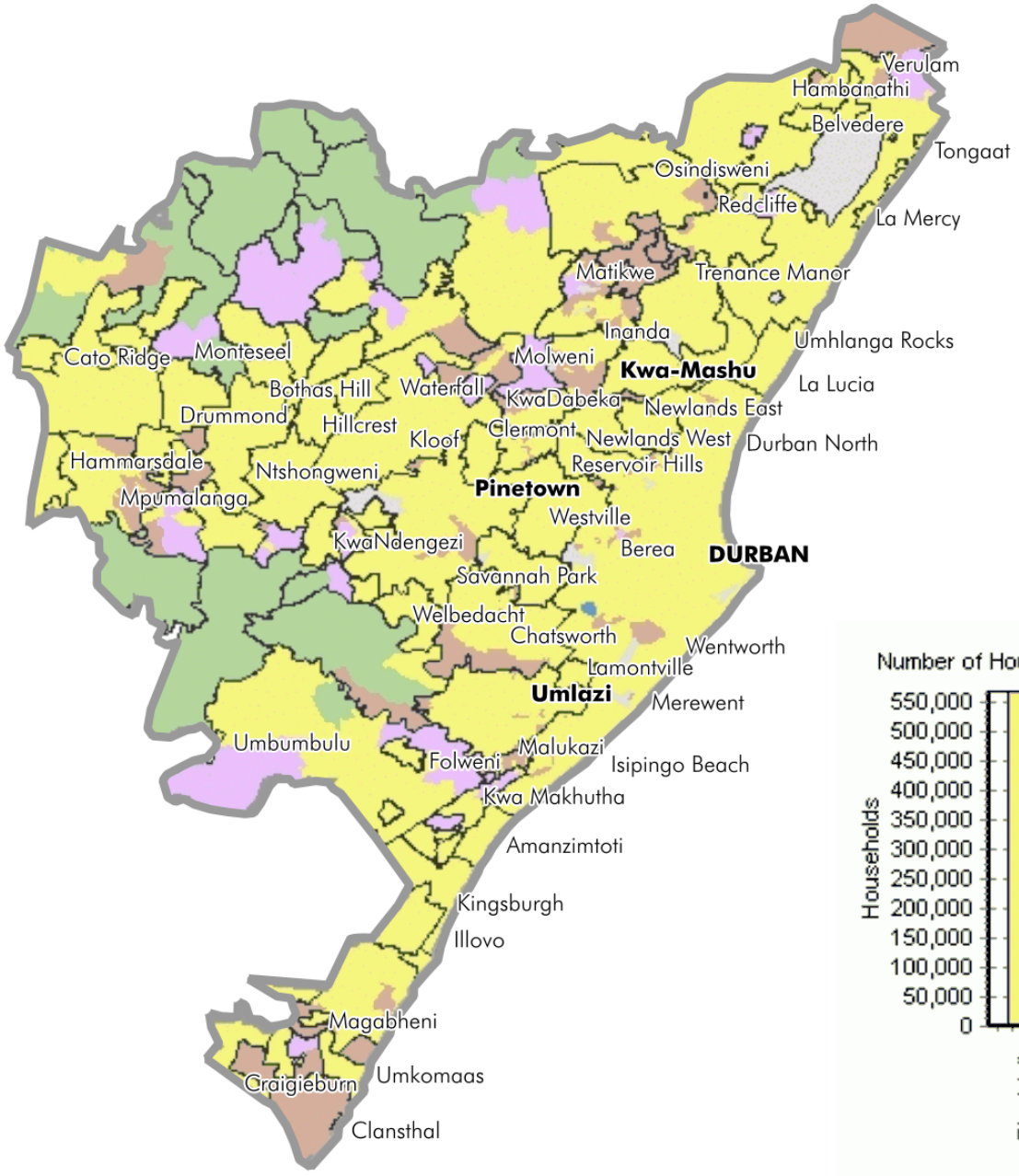
Dominant* Energy Source for Lighting, 2001

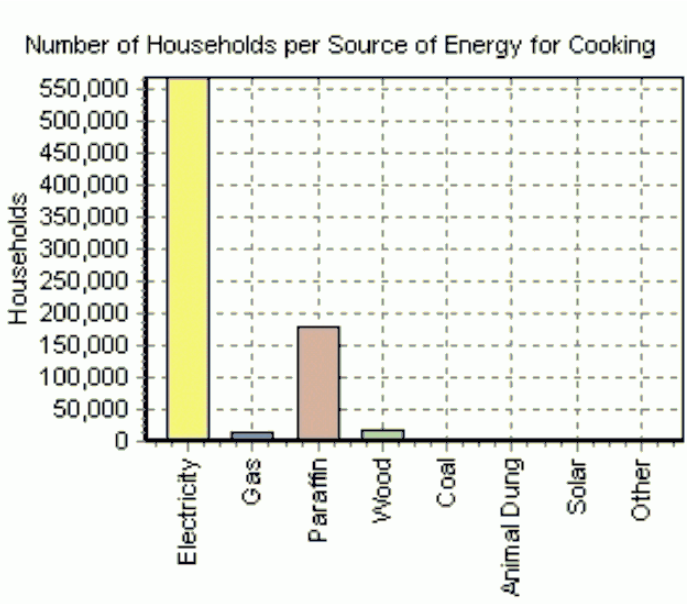




Energy Source Candles | Electricity | Gas | Paraffin | Solar | Mutiple | Other | None

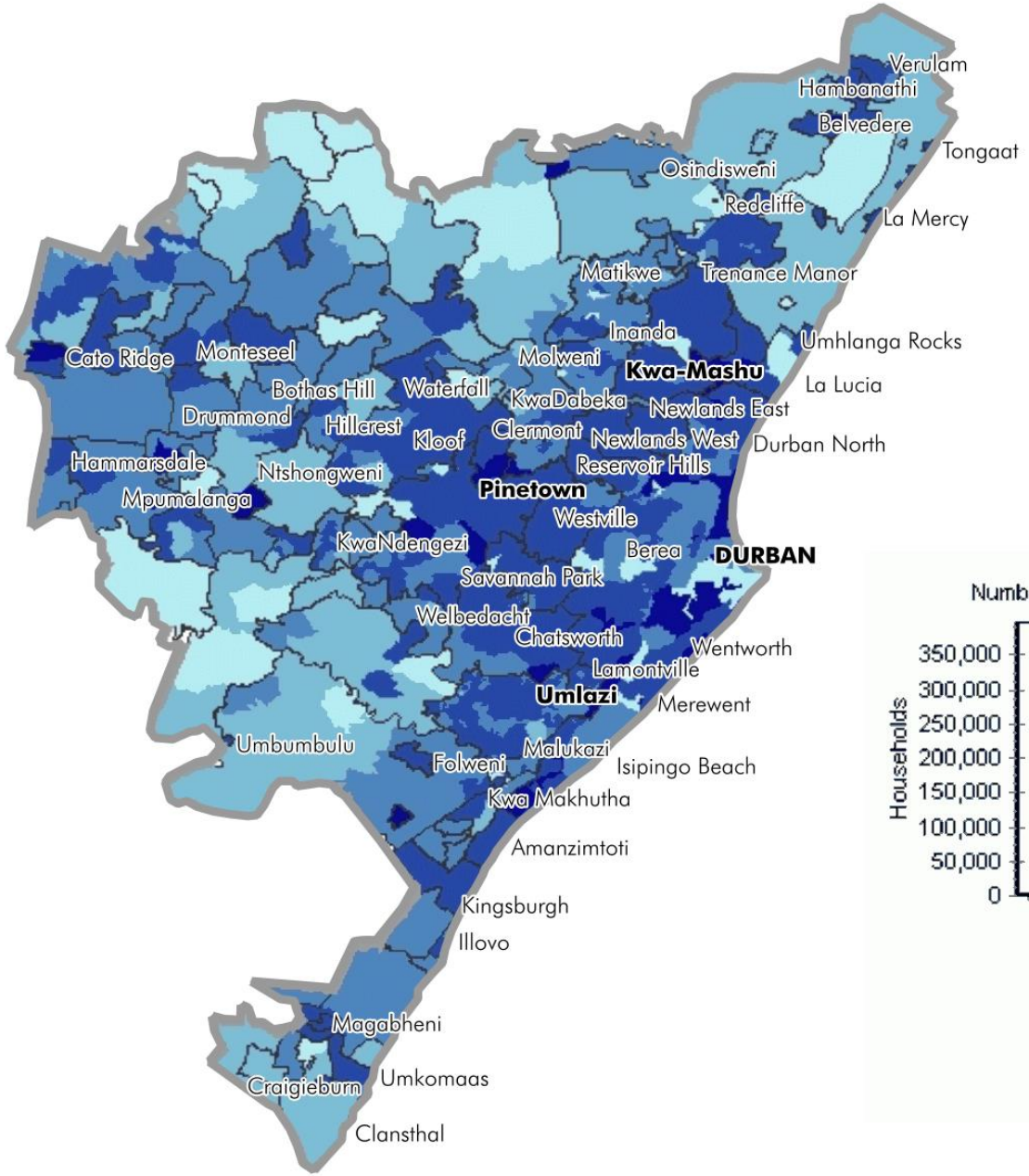
Dominant* Energy Source for Cooking, 2001

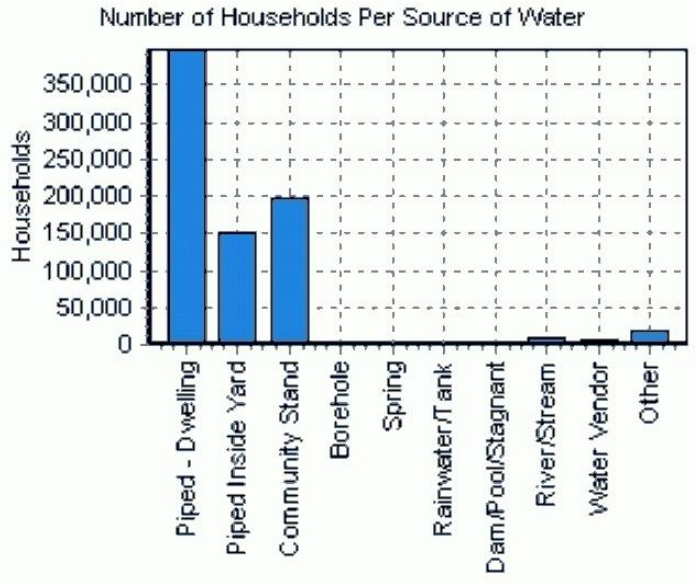




Energy Source: Animal_Dung, Coal, Electricity, Gas, Paraffin, Solar, Wood, Other, Multiple

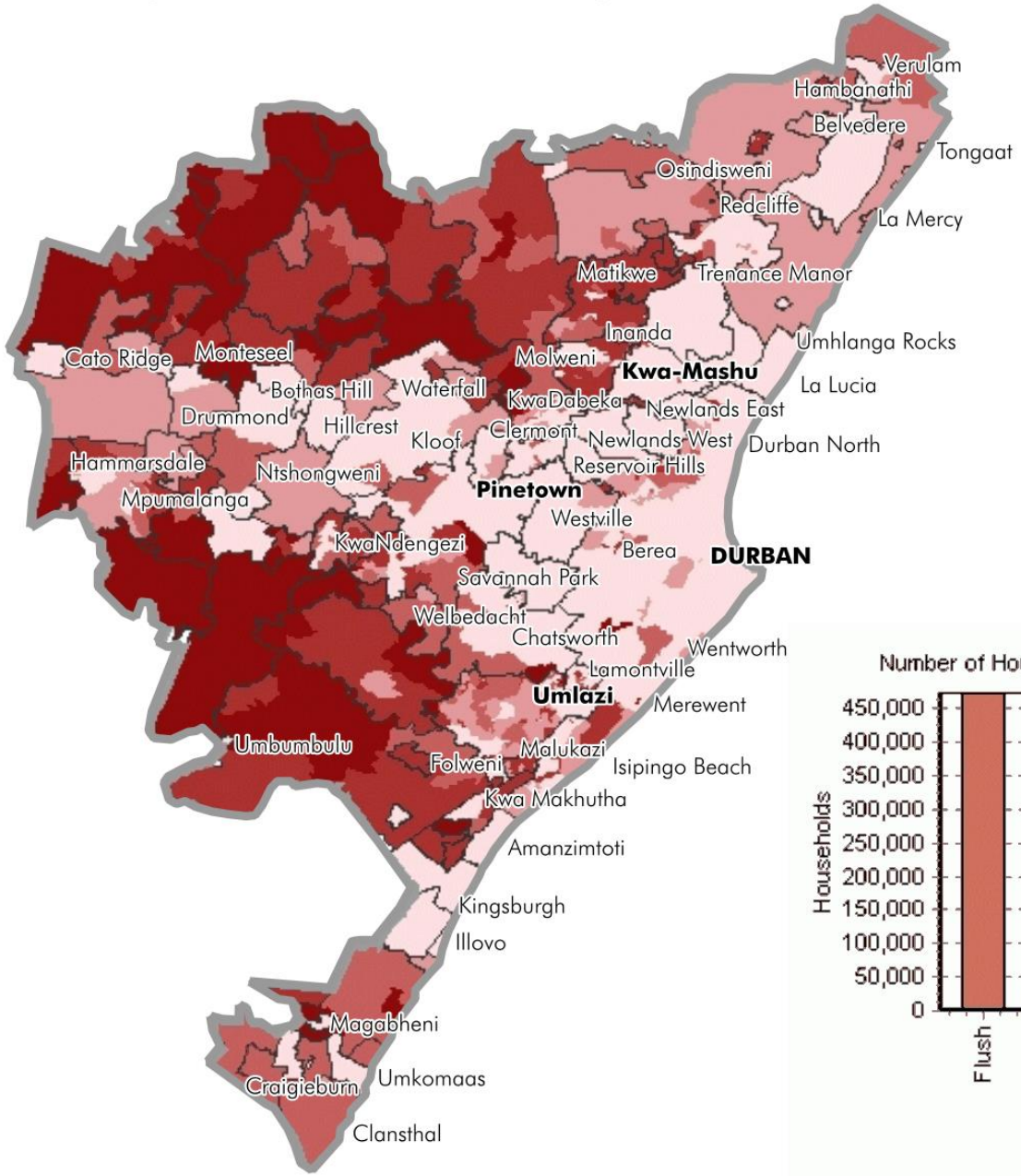
Percentage Households with Access to Piped Water, 2001

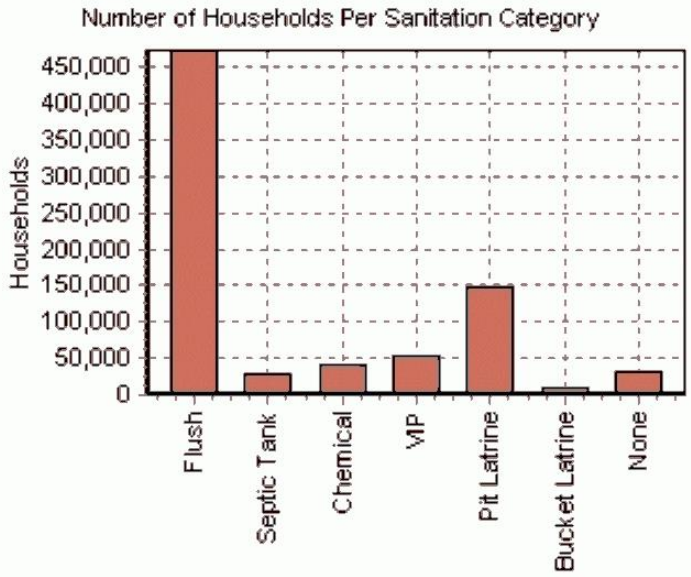




Percentage* 0.00 - 21.13 | 21.14 - 54.60 | 54.61 - 72.34 | 72.35 - 87.43 | 87.44 - 100.00

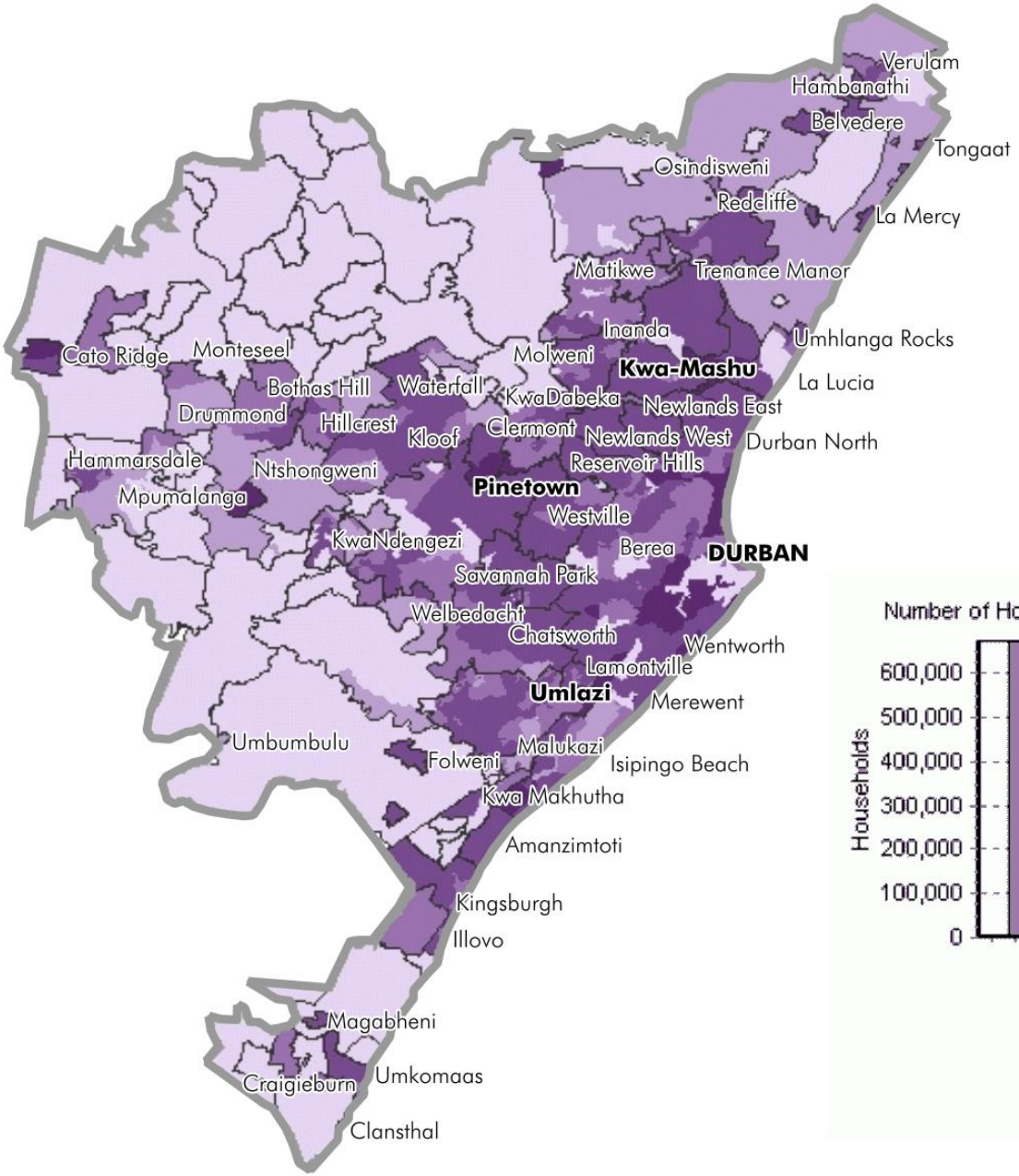
Percentage Households without "improved" Toilet Facilities, 2001

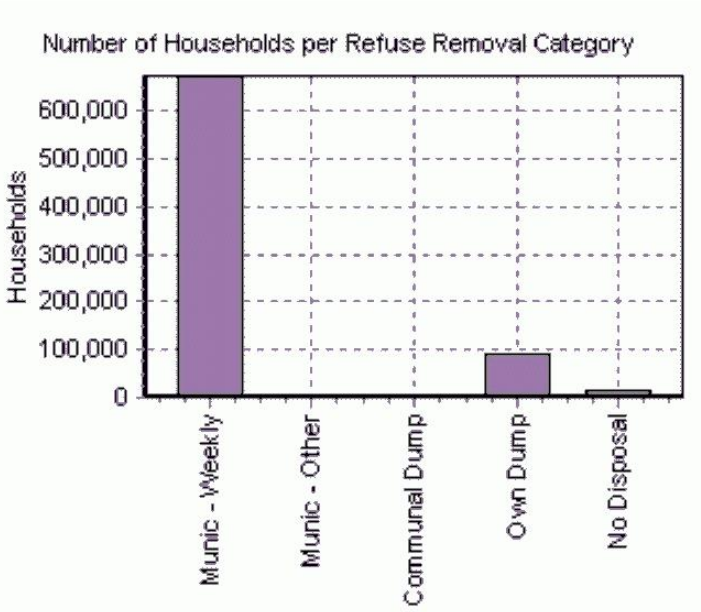




Percentage* 0.00 - 9.25 | 9.26 - 28.10 | 28.11 - 51.50 | 51.51 - 70.59 | 70.60 - 100.00

Percentage Households with Refuse Removal by Municipalities, 2001





Percentage* 0.00 - 19.17 | 19.18 - 52.55 | 52.56 - 72.62 | 72.63 - 87.43 | 87.44 - 100.00

Improving GDP

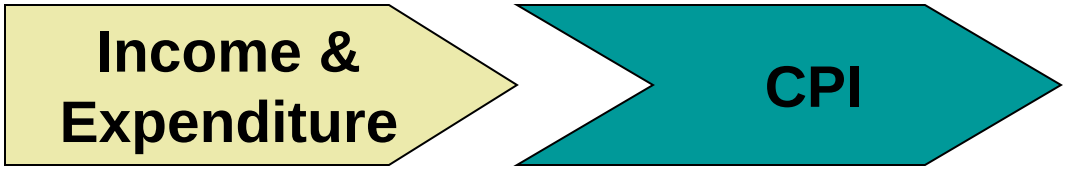
Value Chain

Key Goal: Improve detail and coverage – service , construction, agriculture

	Business Register	Business Surveys
Past	New register – tax records First samples – VAT records	New samples drawn
Present	First publication – new BR Introduced Quality improvement survey	Bigger sample for Economic Activity Survey (EAS) Strengthened large sample surveys Introduced new tourism surveys Some economic analytical capacity
Future	- Establish Large Business unit; - Improving classifications; - Access to RSC levy data; - Business activity geo-referencing	To improve: - coverage of short term indicators - response rates and sample size on manufacturing, trade & fin stats - classifications - economic analytical capacity - research expenditure side of GDP

Improving the CPI

Value Chain



Key Goal: Update basket and ensure accuracy of index

	Income and Expenditure	CPI collection
Past	Every five years Recall method	Forced to revise CPI because of outdated rental data Substantive review of methodology Decide to change methodology to direct price collection
Present	Piloting diary method in the field	Pilot and implement new direct collection method in Gauteng and Mpumalanga
Future	Conduct diary method in field – 2005 Conduct IES every three years	Roll out new methodology in all provinces and phased in use of new data in index to end in 2006

Dealing with challenges

- Registers and their management
- Management information systems
- Frameworks including legislative ones
- Devolution of action
- Centralisation of metadata
- Competency improvement and uniformity of training
- Transparency

System of Statistics in Stats SA

National Accounts

- Quarterly GDP
- Annual GDP
- GDP per region
- *Supply and use tables*
- *Tourism Satellite Accounts*
- *Social Accounting Matrix*
- *Natural Resource Accounts*

Monthly series

Economic Statistics

- Consumer Price Statistics
- Rural consumer Price Index
- Production Price Statistics
- *Price Index for Services*
- JBCC (user paid) **- (not N/A)**
- Mining Production & sales
- Manufacturing Product' & sales
- Manufacturing Utilisation of production capacity
- Generation and consumptionof electricity
- *Tourism accommodation survey*
- *Restaurant, fastfood outlets, bars & canteens*
- *Trading statistics of Hotels*
- *Land Freight Transport*
- *Wholesale Trade sales*
- *Retail Trade Sales*
- *Retail Trade in Motor vehicles and Accessories*
- *Liquidations and Insolvencies*
- *Building Statistics*

Quarterly series

Economic Statistics

- Financial Statistics on Municipalities
- Survey on Levies
- Financial Statistics (QFS) - private sector

Employment Statistics

- SEE
- AME
- QES
- LFS (6 monthly)

Annual series

Economic Statistics

- Consolidated General Government Institutions
- National Govern' expenditure
- Provincial Govern' expenditure
- Extra-budgetary Accounts and Funds
- Universities and Technikons
- Financial Statistics on Municipalities
- Building Statistics
- Economic Activity Survey
- Actual and Expected Capital Expenditure of Government
- Municipalities: *Non-financial data* **(not N/A)**

Social and Population

- General Household Survey
- Causes of Death **(not N/A)**
- Recorded Live Births **(not N/A)**
- Mid-year population estimates **(not N/A)**
- *Marriages and divorces* **(not N/A)**

3 Yearly series

Economic Statistics

- *Business services (LSS)*
- *Mining (LSS)*
- *Manufacturing (LSS)*
- *Wholesale and Retail trade (LSS)*
- *Motor trade (LSS)*
- *Post and Telecommunication (LSS)*
- *Transport (LSS)*

Social and Population

- *Census replacement survey*

5 /10 Yearly or Occasional series

Economic Statistics

- Income and Expenditure (5 yr)
- Agriculture Census (periodic)

Social and Population

- Population Census (10 yr)

Business Address Register

Spatial frame/Physical Address Register

Blue = SDDS requirement; Green = SDDS but not National Accounts; *Red = Not SDDS*