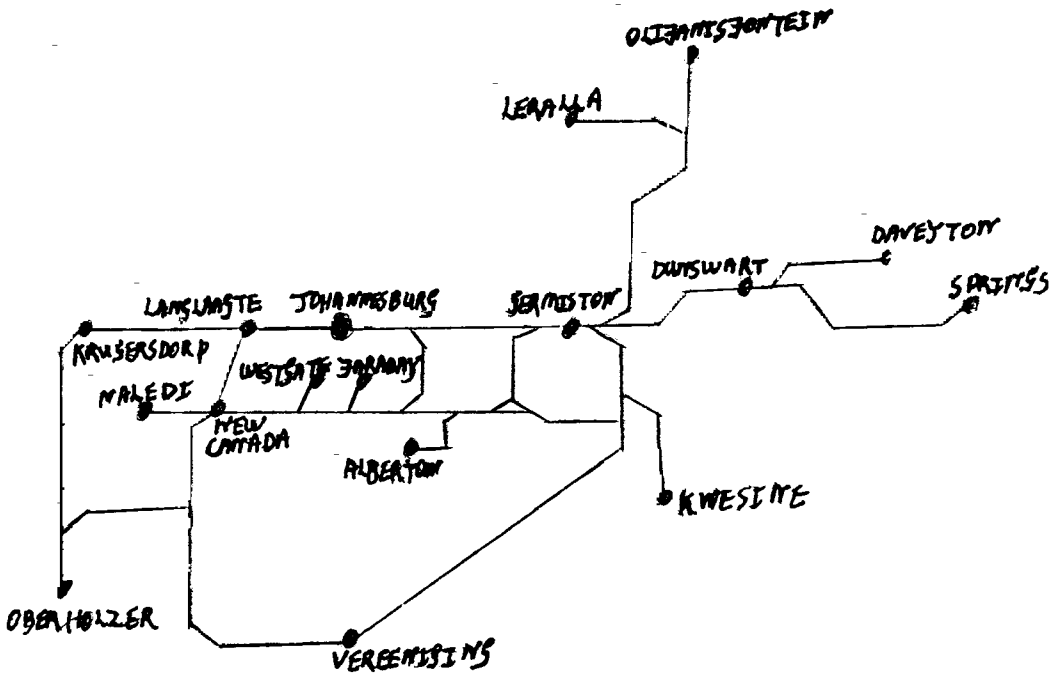
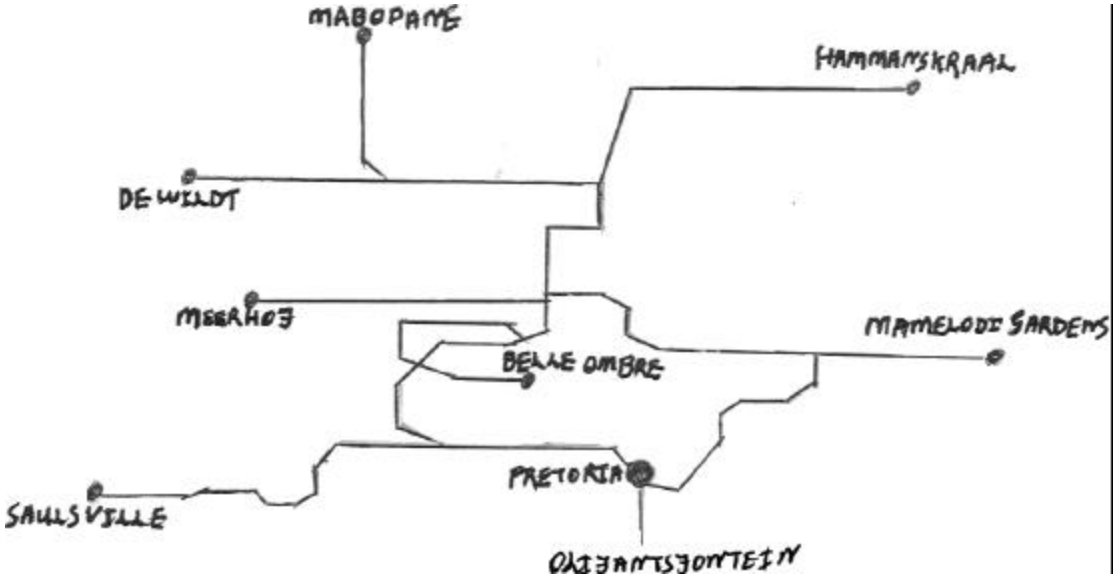
Annexure 3

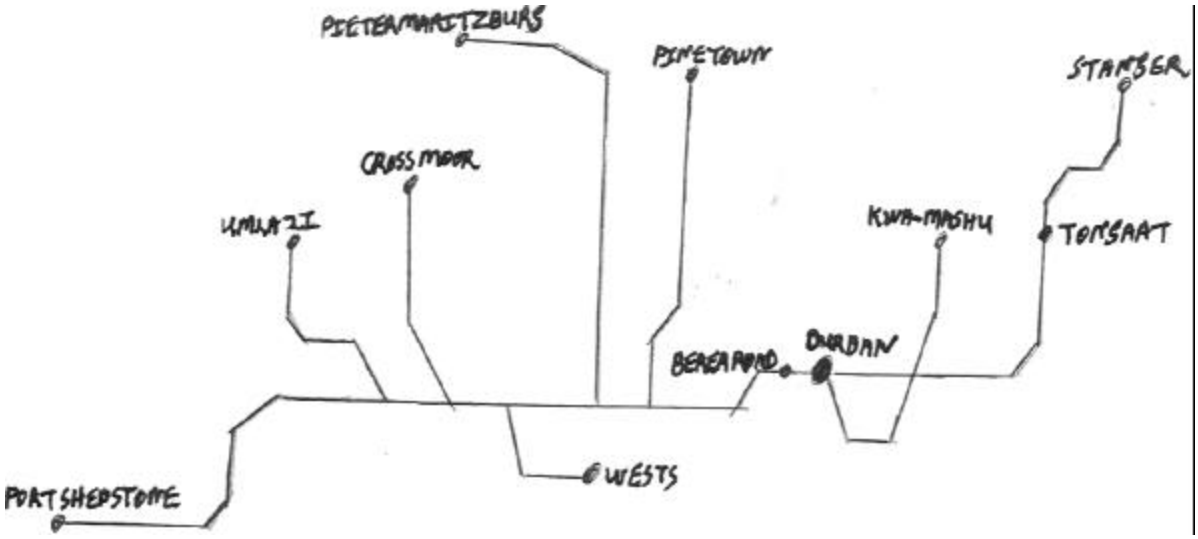
JOHANNESBURG COMMUTER RAIL NETWORK



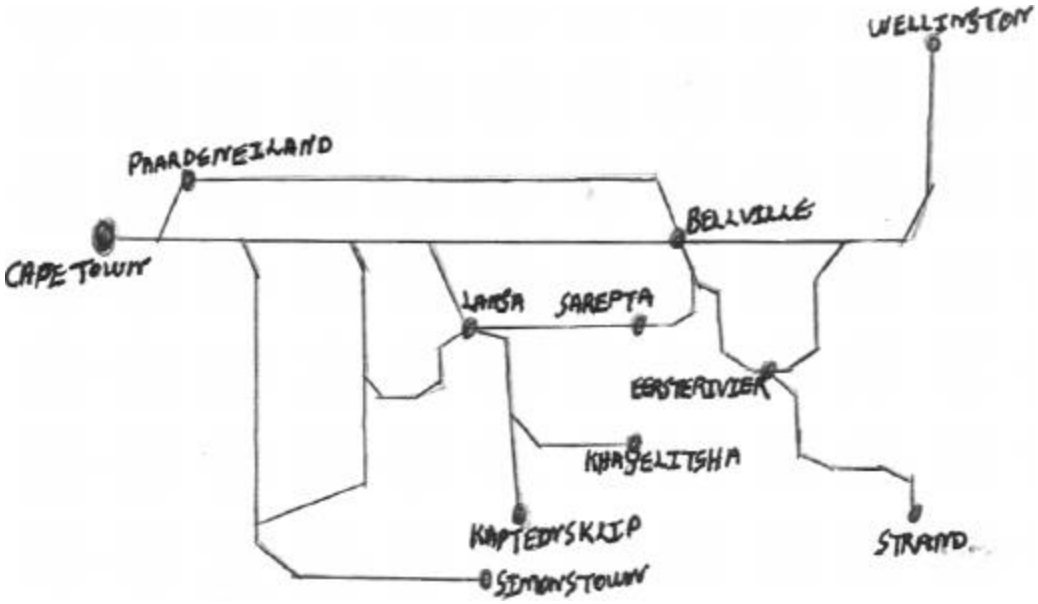
PRETORIA COMMUTER RAIL NEWTORK



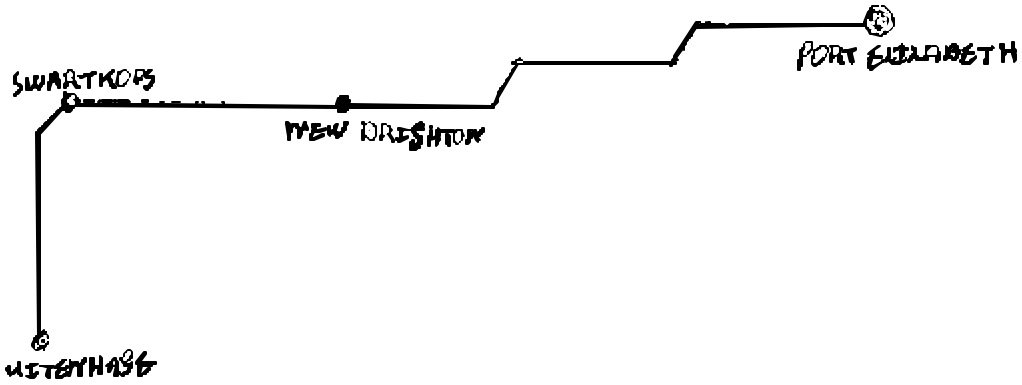
DURBAN COMMUTER RAIL NETWORK



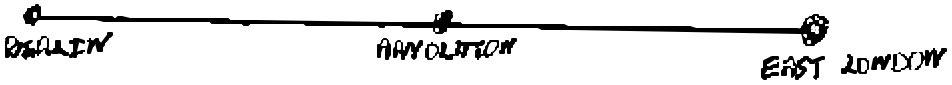
CAPE TOWN COMMUTER RAIL NETWORK



PORT ELIZABETH COMMUTER RAIL NETWORK



EAST LONDON COMMUTER RAIL NETWORK



Source (Dept of Transport & SARCC, 1996: 9-13)

Cost efficiency (1971-1990), return to density (1990) and return to scale (1990)

	Operators comparison	Return to density	Return to scale	Train km per annum (000)	Length of line (km)	Density (train km per line km)
British Rail	1.17*	1.11	0.72	445 060	16 584	26 837
FF (Switzerland)	1.46	0.81	1.22	122 394	2 978	41 099
CIE (Eire)	0.86*	6.00	1.23	14 237	1 944	7 324
DB (West Germany)	1.03*	1.33	0.64	603 797	26 949	22 405
DSB (Denmark)	1.38	1.10	1.26	52 160	2 344	22 252
FS (Italy)	1.39	1.48	0.69	314 255	16 066	19 560
NS (Netherlands)	1.17*	0.77	1.25	117 314	2 798	41 928
NSB (Norway)	0.99*	4.44	1.02	36 705	4 044	9 076
OBB (Austria)	2.00	1.25	0.88	117 201	5 624	20 839
SJ (Sweden)	0.70	6.04	0.76	99 634	10 801	9 225
SNCB (Belgium)	1.82	1.00	1.10	92 802	3 479	26 675
SNCF (France)	0.73*	2.37	0.60	487 670	34 070	14 313
VR (Finland)	0.94*	53.83	0.89	41 026	5 867	6 993
CP (Portugal)	1.65	1.98	1.05	33 693	3 064	10 996
RENFE (Spain)	1.00	2.08	0.73	168 960	12 560	13 452

* Not significantly different from 1.0 at the 5% level.
Source (Preston, J 1996: 9).