

2010

SOUTH AFRICA NATIONAL FIRE LOSSES

THE FIRE PROTECTION ASSOCIATION OF SOUTHERN AFRICA advises that the statistics which appear in the following pages are compiled from reports recorded by fire and emergency services that responded to and dealt with the incidents.

These reports are reproduced in order to promote an understanding of the trends experienced throughout the country with regard to frequency, cause, occupancy and possible monetary losses. They are not complete due to a number of fire services that either chose not to participate in the process, or whose internal organisational structures were inadequate to the task.

It is important that the full commitment of all fire and emergency management services to the recording and submission of fire statistics to a central resource hub, be a requirement and that

this process be entrenched for the future. There are expectations in this regard and this information will, much like a national population census, enable decisions to be made regarding the provision of new response offices, manpower deployment, public education, fire prevention efficacy and the directing of technical information to where it is most needed.

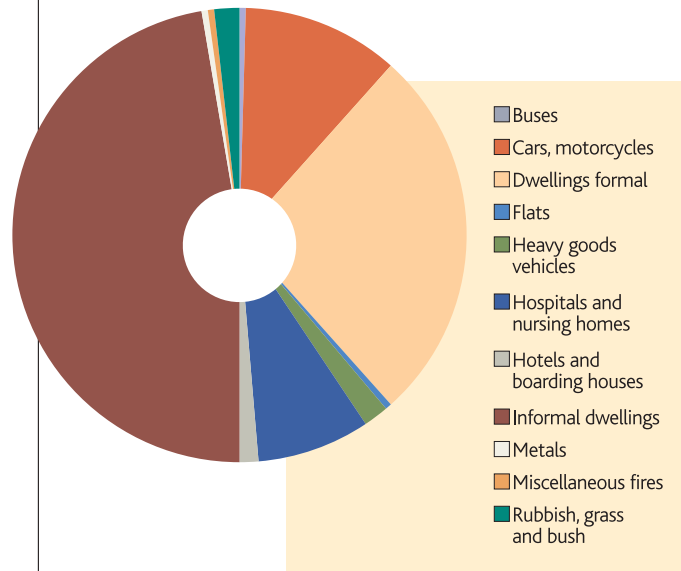
This will be no easy task. Fire fatality reports, as an example, will inevitably be confined to cases where persons were found dead at the incident. Fire fatalities that occur in circumstances where the fire services were not involved, or even when death only occurs after patients are admitted to a hospital, will too often be excluded from valuable and pertinent statistical records. In the interim, we must deal with what confronts us, an unacceptable fire loss that considerably exceeds R 1,3 billion for the year 2010.

The FPASA is indebted to the many fire departments and fire authorities (listed in the following pages), that have participated in advancing the process of collating these annual fire statistics into an informative reference to facilitate the advancement of fire safety and prevention



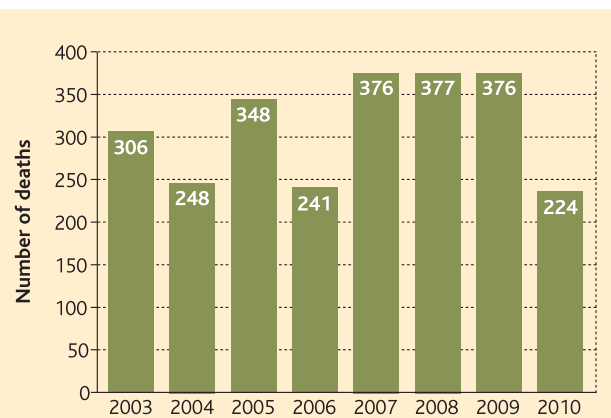
DEATHS

Deaths by sector



Description	Adult and child
Buses	1
Cars, motorcycles	25
Dwellings formal	60
Flats	1
Heavy goods vehicles	4
Hospitals and nursing homes	18
Hotels and boarding houses	3
Informal dwellings	106
Metal	1
Miscellaneous	1
Rubbish, grass and bush	4
TOTAL	224

Deaths compared 2003 - 2010



FIRE CAUSES

Breakdown of fire losses for 2010

(Fire and emergency services in attendance)

Description	Smoking	Electrical	Open flames	Cooking	Heating	Welding	Lightning	Arson	Unrest	Undetermined	Other	Total	Rand damage
Dwellings formal	60	525	427	258	136	28	14	156	0	739	235	2578	525,406,578
Informal dwellings	64	220	734	249	112	10	11	151	1	965	73	2590	64,719,575
Flats	12	57	21	29	20	0	0	4	0	35	4	182	21,695,900
Hotels and boarding	3	13	4	6	1	0	0	3	0	10	1	41	1,980,700
Hospitals and nursing homes	3	8	4	1	0	0	0	1	0	12	5	34	6,163,550
Educational establishments	0	13	13	1	6	2	0	18	0	15	1	69	6,527,900
Churches and halls	1	7	6	1	2	0	0	3	0	12	0	32	1,792,450
Cinemas and theatres	1	0	2	0	0	0	0	0	0	2	2	7	72,000
Museums, libraries and art galleries	0	2	1	0	2	1	0	0	0	1	0	7	477,000
Night clubs and dance halls	0	4	0	2	0	1	0	1	0	8	0	16	1,164,200
Restaurants and cafes	3	16	17	24	8	0	0	2	0	9	1	80	4,403,200
Offices	1	61	9	7	17	10	0	8	0	35	5	148	42,800,000
Shops	4	67	29	32	31	9	0	10	0	43	6	231	178,466,900
Department stores	0	9	2	0	8	0	1	1	0	1	1	23	3,759,000
Garages and workshops	1	16	14	0	4	10	0	2	0	17	8	72	72,157,000
Warehouses	1	9	12	0	4	1	1	3	0	14	5	50	27,110,800
Outside storage	6	5	47	1	3	3	0	9	0	22	3	99	66,229,500
Furniture	0	5	7	0	1	0	0	0	0	5	1	19	44,901,000
Plastics and rubber	0	3	10	0	6	2	1	2	0	42	3	69	19,307,310
Textile	0	6	4	0	6	1	0	1	0	7	1	26	12,583,600
Printing	0	4	0	0	0	0	0	0	0	3	0	7	20,852,000
Milling	0	1	2	0	4	1	0	1	0	3	1	13	2,941,000
Petroleum	1	3	1	0	0	1	1	1	0	8	4	20	7,722,900
Food and drink	0	0	0	4	0	0	0	0	0	1	1	6	1,662,000
Paper and packaging	0	4	3	2	2	0	0	2	0	6	3	22	20,964,300
Chemical	0	2	7	0	9	0	1	0	0	14	3	36	4,270,200
Metal	2	15	12	0	5	11	0	0	0	14	2	61	27,954,500
Electronics	1	95	10	0	1	0	0	0	0	24	24	155	2,883,900
Mines (surface)	0	1	0	0	0	2	0	0	0	0	1	4	234,000
Utilities	1	51	7	1	5	2	1	3	0	27	4	102	7,940,800
Cars and motorcycles	8	407	133	0	60	52	0	65	0	437	175	1335	44,431,600
Buses	1	25	10	0	7	1	0	8	0	10	8	70	9,601,500
Heavy goods vehicles	5	48	29	0	52	15	0	7	0	63	33	252	36,019,703
Ships	0	2	2	0	1	2	0	0	0	0	3	10	100,702
Trains	0	8	3	0	1	1	0	9	0	8	0	30	15,500,000
Aircraft	1	3	4	0	2	0	0	1	0	3	2	16	3,332,000
Rubbish, grass and bush	669	42	11169	218	57	152	96	171	2	3694	639	16909	1,028,154
Plantations and forests	1	0	62	1	0	0	6	2	0	26	6	104	30,000
Agricultural	0	2	46	0	0	0	0	1	0	44	2	95	172,500
Miscellaneous	10	351	272	23	13	27	8	18	2	163	67	954	13,659,150
Total incidents	860	2110	13135	860	586	345	141	664	5	6542	1333	26574	1,323,019,072.
Total	3%	8%	49%	3%	2%	1%	1%	2%	0%	25%	5%		

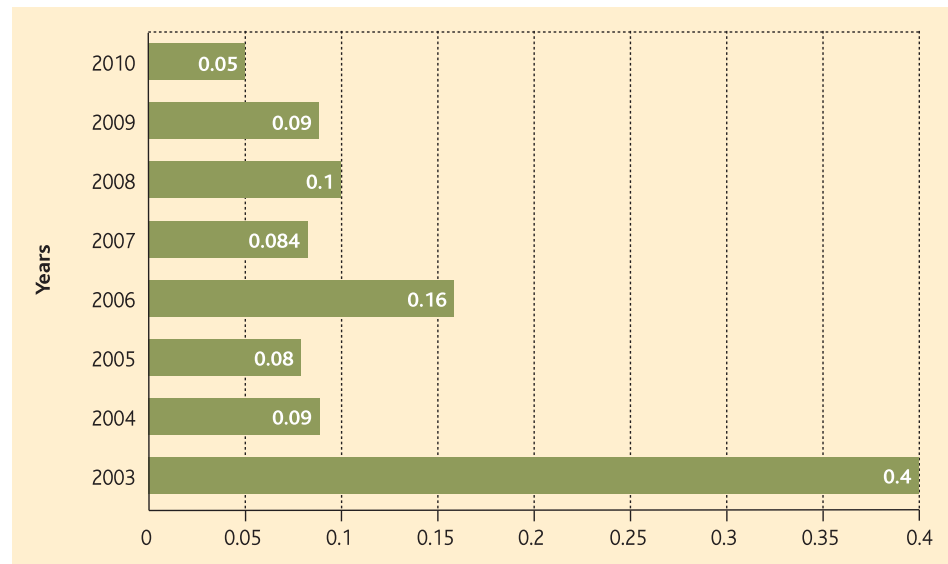
FIRE LOSSES

Compared fire losses 2003 - 2010

	2003	2004	2005	2006	2007	2008	2009	2010
Total loss in Rands	4833.8	1211.9	1321.5	2732.9	1630.6	2312.5	2013.6	1323
GNI	1184.0	1346.5	1492.2	1705.3	1935.5	2209.9	2342.4	2608.5
Fire loss as a % of GNI	0.40%	0.09%	0.08%	0.16%	0.084%	0.10%	0.09%	0.05%
No. of fires	38.6	36.5	42.8	26.4	40.5	35.4	40.4	26.5
Population	46.4	46.9	46.9	47.8	48.6	49.3	49.9	49.9

Notes to table:
 Total loss in millions
 GNI Gross National Income - in thousand millions
 Number of fires in thousands
 Population in millions

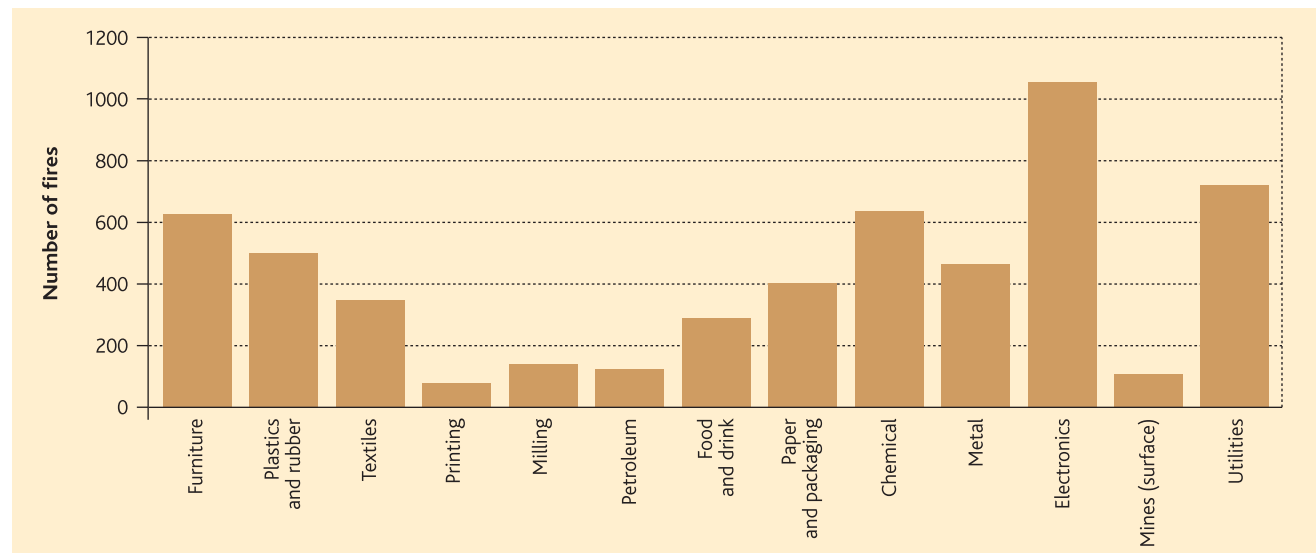
Fire loss % of Gross National Income



Compared number of fires 2003 - 2010

Year	Number of fires
2003	38631
2004	36591
2005	42863
2006	26475
2007	40582
2008	35432
2009	40481
2010	26574

Number of fires by sector 2010



FIRE LOSSES

Breakdown by category 2010

Description	Number of incidents
Dwellings formal	2578
linformal dwellings	2590
Flats	182
Hotels and boarding houses	41
Hospitals and boarding homes	34
Educational establishments	69
Churches and halls	32
Cinemas and theatres	7
Museum, libraries and art galleries	7
Night clubs and dance halls	16
Restaurants and cafes	80
Offices	148
Shops	231
Department stores	23
Garages and workshops	72
Warehouses	50
Outside storage	99
Furniture	19
Plastics and rubber	69
Textile	26
Printing	7
Milling	13
Petroleum	20
Food and drink	6
Paper and packaging	22
Chemical	36
Metal	61
Electronics	155
Mines (surface)	4
Utilities	102
Cars, motorcycles	1335
Buses	70
Heavy goods vehicles	252
Ships	10
Trains	30
Aircraft	16
Rubbish, grass and bush	16909
Plantations and forests	104
Agricultural	95
Miscellaneous fires	954
TOTAL	26574

FIRE LOSSES: INDUSTRIAL

Compared industrial fire losses 2009 - 2010

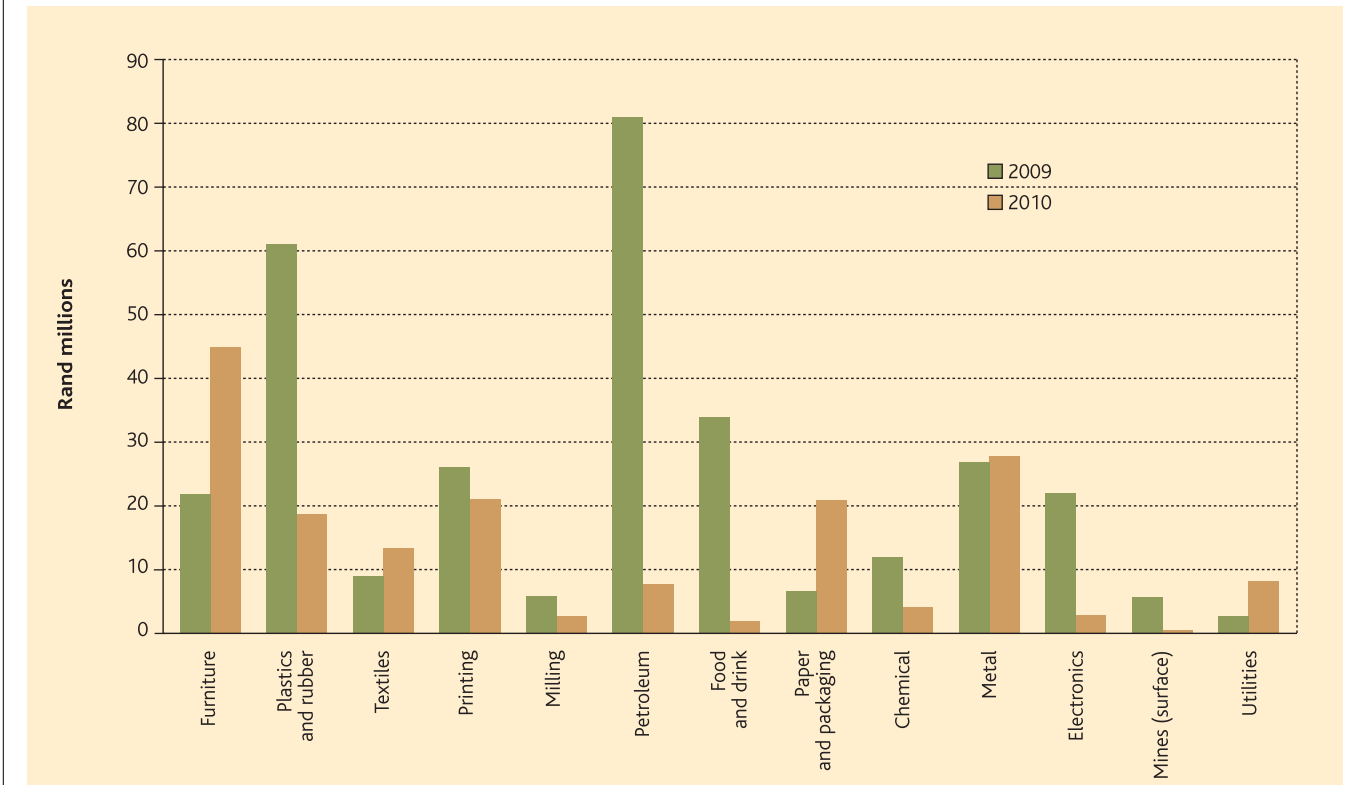
Description	Damage		2010 incidents
	2009	2010	
Furniture	R 21,806,192	R 44,901,000	19
Plastics and rubber	R 60,446,873	R 19,307,310	69
Textile	R 9,122,312	R 12,583,600	26
Printing	R 26,151,250	R 20,852,000	7
Milling	R 5,838,581	R 2,941,000	13
Petroleum	R 80,827,800	R 7,722,900	20
Food and drink	R 34,028,938	R 1,662,000	6
Paper and packaging	R 6,919,910	R 20,964,300	22
Chemical	R 11,718,053	R 4,270,200	36
Metal	R 27,434,205	R 27,954,500	61
Electronics	R 22,297,170	R 2,883,900	155
Mines (surface)	R 6,005,000	R 234,000	4
Utilities	R 2,711,915	R 7,940,800	102
TOTAL	R 315,308,200	R 174,217,510	540

Compared industrial fire calls 2004 - 2010

Number of incidents

Description	2004	2005	2006	2007	2008	2009	2010
Furniture	44	47	27	414	55	15	19
Plastics and rubber	65	63	33	94	73	96	69
Textile	65	61	45	67	34	38	26
Printing	12	9	6	18	8	13	7
Milling	16	33	10	21	21	22	13
Petroleum	9	22	13	21	16	20	20
Food and drink	47	46	43	50	35	59	6
Paper and packaging	35	37	25	226	27	24	22
Chemical	52	33	26	345	79	53	36
Metal	51	85	38	80	69	74	61
Electronics	132	116	129	135	191	170	155
Mines (surface)	10	11	2	54	10	5	4
Utilities	121	78	38	150	110	114	102
TOTAL	659	641	435	1675	728	703	540

Industrial losses by sector



Industrial fire calls

Furniture	621
Plastics & rubber	493
Textiles	336
Printing	73
Milling	136
Petroleum	121
Food & drink	286
Paper & packaging	396
Chemical	624
Metal	458
Electronics	1028
Mines (surface)	96
Utilities	713
Total	5381

FIRE LOSSES: FINANCIAL

**Compared fire losses
2003-2010**

**Compared losses
2003-2010**

Description	R Sum of damage	Year	R Damage
Residential	613,802,753	2003	4,833,873,434
Institutional	12,691,450	2004	1,211,926,334
Public Assembly	3,505,650	2005	1,321,494,810
Commercial	301,586,100	2006	2,732,970,948
Storage	93,340,300	2007	1,630,663,463
Industry	174,217,510	2008	2,312,573,486
Transport	108,985,505	2009	2,013,698,822
Other	14,889,804	2010	1,323,019,072
Total	R 1,323,019,072		

FIRE LOSSES: RESIDENTIAL

Compared residential fire losses 2005 - 2010

ZA Rand per year

Description	2005	2006	2007	2008	2009	2010
Dwellings Formal	240,213,106	1,953,447,608	387,890,154	387,199,972	495,170,058	525,406,578
Informal dwellings	58,351,067	39,488,351	105,547,103	76,827,903	101,174,052	64,719,575
Flats	25,951,470	24,699,595	42,713,920	29,625,287	31,858,641	21,695,900
Hotels and boarding houses	25,540,625.00	6,280,550	37,120,250	11,313,775	38,899,991	1,980,700
TOTAL	350,056,268	2,023,916,104	573,271,427	504,966,938	667,102,743	613,802,753

Estimated residential (informal) fire losses

Year	R Damage	Year	R Damage
2003 (3562)	31,197,541	2007 (4273)	105,547,103
2004 (3566)	286,929,364	2008 (3279)	76,827,903
2005 (3342)	58,351,067	2009 (4008)	101,174,052
2006 (3105)	39,488,351	2010 (2590)	64,719,575

BRIGADE CALLS 2010

	RESIDENTIAL															INSTITUTIONAL				PUBLIC ASSEMBLY				COMMERCIAL				STORAGE		INDUSTRY															TRANSPORT					OTHER			TOTAL
	Dwelling	In-room dwellings	Flats	Hotels/boarding houses	Hospitals/nursing	Educational estab.	Churches/halls	Cinemas/theatres	Museums etc.	Night clubs/dance	Restaurants/cafes	Offices	Shops	Dept. stores	Carpets/workshops	Warehouses	Outside storage	Furniture	Plastic/rubber	Textile	Printing	Milling	Petroleum	Food/drink	Paper/Packaging	Chemical	Metal	Electronics	Mines (surface)	Utilities	Cars/motorcycles	Buses	Heavy goods vehicles	Ships	Trains	Aircraft	Rubbish/grass/bush	Plantations/forests	Agricultural	Miscellaneous fires													
BETHAL	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1								
BOJANALA (Rustenburg)	3	9	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	1	6	1	1	-	-	-	-	44	-	69	-	-	-	137											
BREEDE RIVER WINELANDS (Worcester)	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	1	6ZZ											
CAPE TOWN METRO	190	172	10	1	-	-	-	2	-	-	-	2	7	-	2	1	2	-	-	-	-	1	-	-	-	-	20	-	12	101	-	3	-	1	-	821	1	-	-	39	1388												
EKURHULENI (Alberton, Benoni, Boksburg, Brakpan, Kempton)	321	385	4	10	6	7	3	-	1	-	7	8	28	3	8	8	7	2	24	4	-	1	7	1	12	14	19	15	3	29	94	4	41	-	6	1	905	4	2	31	2025												
EMADLANGENI (Utrecht)	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	12											
EMFULENI (Vanderbijlpark)	77	70	3	1	-	2	-	-	-	-	2	-	7	1	3	-	4	-	-	-	-	3	-	-	-	5	1	-	-	15	1	7	-	2	-	240	-	-	-	1	445												
EMNAMBITHI (Ladysmith)	5	9	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	1	-	-	-	119	-	-	-	-	18	157												
ETHEKWINI UNICITY (Durban)	490	508	57	10	9	25	12	2	1	1	23	36	65	5	33	21	46	12	13	11	6	8	4	3	5	12	11	2	-	12	354	23	65	6	9	14	6865	29	12	462	9282												
GRAAFF-REINET-CAMDEBOO	7	15	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	2	1	-	-	-	-	40	-	1	-	-	70												
JOHANNESBURG	264	239	11	4	-	-	1	2	-	8	5	2	9	1	3	1	2	-	-	-	-	1	-	-	-	1	26	-	16	169	2	3	-	2	-	893	2	-	59	1726													
KHARA HAIS (Upington)	8	29	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	-	-	-	-	-	-	-	-	3	-	-	11	-	-	-	-	-	87	11	2	3	-	160													
KWA-DUKUZA (Ballito)	31	51	-	1	7	3	3	-	1	-	3	-	2	-	-	2	2	1	22	7	-	-	-	-	-	-	8	-	-	31	-	1	-	1	-	449	24	8	-	658													
LANGEBERG	29	125	5	-	-	-	2	-	-	3	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-	-	6	-	6	-	-	-	363	-	-	-	74	626												
LUKHANJI (Queenstown)	47	40	3	-	1	-	2	-	-	-	-	1	-	-	-	1	4	-	-	-	-	-	-	-	-	-	1	-	-	16	1	7	-	1	-	88	-	-	-	-	213												
MAKANA (Grahamstown)	20	22	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	1	-	-	-	88	-	-	-	7	145													
MANGAUNG (Bloemfontein)	128	129	1	2	1	3	-	1	-	-	1	5	3	-	1	-	7	1	-	1	-	2	-	2	-	2	9	-	11	48	7	9	-	-	1	807	1	-	-	-	1183												
METSIMAHOLO (Sasolburg)	50	32	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	6	-	10	-	-	-	225	-	-	-	-	-	327												
MIDVAAL	19	21	-	-	-	-	-	-	-	-	2	-	-	1	-	2	9	-	-	-	-	-	-	-	-	-	-	-	4	9	1	5	-	-	-	208	-	-	-	1	283												
MOGALAKWENA (Potgietersrus)	36	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	-	-	18	-	2	-	-	-	239	-	-	-	-	299												
MOSSEL BAY	67	77	6	-	-	-	-	-	-	-	1	2	-	-	2	2	-	-	3	-	-	-	-	-	-	-	-	-	8	-	2	4	-	-	214	-	-	-	16	404													
NELSON MANDELA (Port Elizabeth)	122	212	15	4	6	11	4	-	-	2	4	7	7	1	12	1	7	1	3	2	1	1	1	-	-	2	5	-	-	118	6	9	-	-	-	365	7	1	31	968													
POLOKWANE (Pietersburg)	27	79	2	2	1	2	-	-	-	-	-	2	9	-	-	-	1	-	-	-	-	-	-	-	-	3	22	-	-	28	-	4	-	-	-	325	2	-	2	-	511												
STEVE TSHWETE (Hendrina)	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	2	-	1	-	1	-	3	-	-	-	-	15												
STEVE TSHWETE (Middleburg)	17	20	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	9	6	-	5	-	-	-	229	-	-	-	-	289												
TSHWANE METRO (Pretoria)	562	287	62	4	1	13	5	-	3	1	28	73	90	11	6	5	4	1	2	-	-	-	1	2	3	11	-	-	7	225	21	46	-	7	-	2514	5	-	201	4202													
UMHLATHUZE (Empangeni)	34	36	2	2	1	2	-	-	1	-	1	3	1	-	2	2	2	-	2	-	3	-	-	-	2	2	31	1	1	44	-	14	-	-	-	579	18	-	5	791													
UMTSHEZI (Escourt)	22	4	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	3	-	-	8	2	9	-	-	-	197	-	-	-	3	251												
Total	2578	2590	182	41	34	69	32	7	7	16	80	148	231	23	72	50	99	19	69	26	7	13	19	6	22	35	61	155	4	102	1335	70	252	10	30	16	16909	104	95	954	26574												