



**INTERNATIONAL ROAD FEDERATION
2007 ROAD SAFETY AWARDS**

**SUPPORTING DOCUMENTATION
(ADDENDUM – ADDITIONAL INFORMATION)
26 FEBRUARY 2008**

SUBMISSION BY: THE CITY OF TSHWANE, SOUTH AFRICA

**PROJECT NAME: DEVELOPMENT AND IMPLEMENTATION OF
ROAD SAFETY MASTER PLANS: AN
INCLUSIVE APPROACH**

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**INTERNATIONAL ROAD FEDERATION
2007 ROAD SAFETY AWARD**

**DEVELOPMENT AND IMPLEMENTATION OF ROAD SAFETY MASTER PLANS:
AN INCLUSIVE APPROACH**

PROJECT SUMMARY

Road and pedestrian accidents have been identified as a major cause of deaths and injuries internationally and have a major financial and social impact on communities. Furthermore, low-income communities suffer disproportionately more because of road accidents. Moreover, formal information on accidents and the location of accidents in these communities often does not exist. This situation led to the question: How do authorities go about to improve road safety in low-income communities where the relevant information is not available in this format? The City of Tshwane, a metropolitan municipality in South Africa (see Annexure A), addressed this problem and achieved great success.

Tshwane is a city in transition and has a mix of established and historically disadvantaged areas. The disadvantaged areas are mainly situated to the north of the city. Since road safety in these areas was severely neglected in the past, the new municipality that came into being in 2000 was faced with a tremendous challenge to improve road safety and provide infrastructure there. Fatality rates were high and the communities were discontented about the road safety situation. They even cordoned off and damaged roads after serious accidents to prevent further accidents and demonstrate their discontent.

The City of Tshwane acknowledged the problem and developed road safety master plans in collaboration with stakeholders and the community. The master plans mainly focused on the provision of engineering measures such as pedestrian bridges, walkways, raised pedestrian crossings, speed humps and loading facilities at schools, but also attended to education, awareness raising, law enforcement and evaluation. In addition, the master plans were used to establish partnerships with other spheres of government as well as other non-government road safety organisations.

During the 2006/07 financial year, all the road safety master plans were updated and refined on the basis of knowledge gained from the process over a few years. Measurable key performance indicators (KPIs) for the provision of engineering measures were included in the Roads and Stormwater Division's scorecard. Implementation was monitored accordingly. All targets set were met, leading to a significant reduction in traffic accidents, injuries and fatalities.

The process has been found to be sustainable and replicable and is unique in that it uses the knowledge of communities and empowers communities to be part of the solution.

1. ADDITIONAL SUPPORTING INFORMATION

With reference to the project entitled "Development and Implementation of Road Safety Master Plans: An Inclusive Approach" I hereby submit additional information to support the statement that great success has been achieved in Tshwane, that measurable key performance indicators for the provision of engineering measures were adopted, and that all the targets set were met in the implementation of the project, which led to a significant reduction in traffic accidents.

2. CITY SCORECARD AND TARGET

The City of Tshwane used a scorecard for determining key performance areas (KPAs) and key performance indicators (KPIs). These were used to measure the performance of the Municipality and individuals. In terms of the City of Tshwane's objective to fight poverty and build clean, healthy, safe and sustainable communities, the following target was set for the reduction of fatalities:

KPA	2006/07				Explanation of variance
	Achieved (KPI)		Target (KPI)		
	No	R	No	R	
Road policing operations and auxiliary services, rendering specialised functions and coordination with internal as well as external partners (eg regions, the province and RTMC) with the primary focus on enhancing road safety.	1. Achieved 12,6% reduction in fatalities per 10 000 registered vehicles. Death rate was 3,08 per 10 000 registered vehicles a year.	27 678 000	Reduction of fatal accidents per 10 000 registered vehicles by 5% a year.	26 512 000	All road policing, and engineering interventions and operations in Tshwane (eg speed law enforcement, overload control, roadblocks, drink-and-drive roadblocks, Arrive Alive Campaign, the Youth and Road Safety and the Pedestrian-in-Traffic campaigns, engineering measures and education) were aimed at reducing road fatalities in Tshwane.

Source: 2006/07 Annual Report (July 2006 – June 2007)

The target set initially was to reduce fatal accidents per 10 000 registered vehicles by 5% a year. The city achieved a reduction of 12,5%, which was significantly higher than the target. The Road Safety Master Plans were instrumental in developing a comprehensive approach that included engineering, enforcement and education.

The accident statistics for 2007 will be analysed in more detail and compared to the 2006 figures in the discussion below.

3. REDUCTION IN FATAL ACCIDENTS AND FATALITIES

The City of Tshwane used the Trafman system to capture accident data and produce management reports on road traffic accidents. Extracts of reports are included in the annexures as proof of the achievement of targets. The table below indicates the number of accidents and casualties a year.

Year	Accidents					Persons				
	Fatal	Serious	Slight	Damage	Total	Fatal	Serious	Slight	No injury	Total
2006	271	2 300	8 462	50 046	61 079	300	2 955	11 650	75 177	90 082
2007	214	2 235	8 208	53 142	63 799	236	2 921	11 189	73 609	87 955

Note: See accident statistics in Annexure A.

The City of Tshwane achieved a 21% reduction in fatal accidents and a similar reduction in fatalities. Serious and slight accidents and injuries were also reduced. Although the total number of accidents increased slightly, the total number of persons injured declined.

The figure below indicates the reduction in fatal accidents and fatalities.

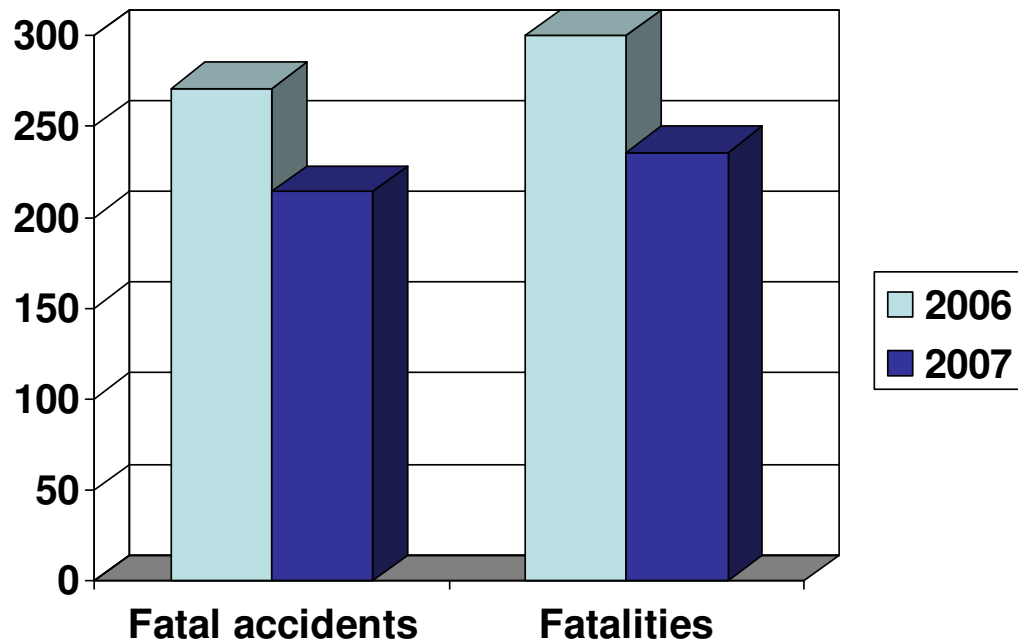


Figure 1: Number of fatal accidents and fatalities a year

The significant reduction in fatalities can be attributed to our comprehensive approach that included the engineering measures described in Section 3 of the main report, as well as targeted law enforcement and education.

4. REDUCTION IN FATALITIES AND SERIOUS INJURIES AMONG THE YOUTH

The Youth and Road Safety Campaign launched at schools had a marked effect on the reduction of fatalities among this vulnerable group. The City of Tshwane targeted vulnerable groups, such as the youth and poor communities, as they were at the greatest risk of, and suffered disproportionately from road traffic accidents. Fatalities and serious injuries for the age group 6 to 20 years are indicated in the table below:

Year	Fatal injuries	Serious injuries
2006	23	238
2007	6	206

Note: See the accident statistics in Annexure B.

As can be seen, there was a significant reduction in fatalities among this group, which can be attributed to engineering measures at the schools as well as the Youth and Road Safety Campaign. Raised pedestrian crossings (flat-table speed humps), public transport facilities and walkways were constructed at schools in line with Road Safety Master Plans.

There was also a significant reduction in fatalities in the age group 21 to 25 years – from 29 in 2006 to 12 in 2007. This can be attributed to a law enforcement campaign aimed at speeding and alcohol abuse at venues that were frequented by this generation.

5. CONCLUSION

During 2007, the City of Tshwane managed to reduce fatal accidents and fatalities caused by road accidents significantly. The development and implementation of Road Safety Master Plans played a major role in achieving this. As part of the implementation plan, law enforcement plans were set up and education and awareness campaigns were run. The tested 4E approach of engineering, education, enforcement and evaluation was followed, which yielded very good results. The dedicated educational campaigns targeted at vulnerable groups also proved to be successful in reducing fatalities and serious injuries.

NUMBER OF ACCIDENTS AND CASUALTIES PER MONTH

Authority : TSHWANE METRO POLICE(4046)

Selection Criteria

Road : All

Period : 01/01/2000 - 26/02/2008

Province : All Provinces

Section : All

Vehicle type : All

Route : All Routes

Node : All

Month	Accidents						Persons					
	Fatal	Serious	Slight	Damage	Total accidents	Fatal	Serious	Slight	No injury	Total persons		
Jan	18	158	640	3770	4586	19	201	861	5832	6913		
Feb	23	178	751	4208	5160	26	222	1030	6357	7635		
Mar	23	209	782	4290	5304	23	273	1111	6433	7840		
Apr	17	180	657	3749	4603	18	243	910	5543	6714		
May	25	177	612	4496	5510	27	226	1058	6720	8031		
Jun	21	172	680	4104	4977	23	207	916	5951	7097		
Jul	38	211	675	4113	5037	42	278	940	6223	7483		
Aug	23	202	774	4523	5522	32	244	1041	7063	8380		
Sep	24	205	732	4225	5186	25	290	1067	6502	7884		
Oct	14	166	711	4514	5405	14	213	930	6818	7775		
Nov	16	215	692	4414	5337	19	264	956	6510	7749		
Dec	29	227	556	3640	4452	32	294	830	5425	6581		
Subtotal:	271	2300	8462	50046	61079	300	2955	11650	76177	90082		
2007												
Jan	21	163	635	4031	4850	28	226	871	6045	7170		
Feb	11	191	717	4483	5402	15	235	933	6342	7525		
Mar	17	225	758	4703	5703	17	302	1006	6830	8155		
Apr	26	193	683	3983	4885	28	253	934	5953	7178		
May	13	211	823	4801	5848	13	272	1084	7331	8700		
Jun	18	187	672	4455	5332	19	243	904	6209	7375		
Jul	27	175	678	4550	5430	28	236	944	6290	7498		
Aug	15	156	655	4646	5472	15	202	936	5868	7021		
Sep	19	195	674	4330	5218	20	251	937	6001	7209		
Oct	16	198	764	5112	6090	17	241	1008	6744	8010		
Nov	16	182	621	4940	5459	20	242	859	5897	6818		
Dec	15	159	528	3408	4110	16	218	773	4289	5295		
Subtotal:	214	2235	8208	53142	63739	236	2921	11189	73609	87955		
2008												

Records Printed : 98
Date Printed : 26/02/2008 7:44:53

Report Name : GEN-SAST
Version : V4.13
User : J.P. Malan

CASUALTIES BY AGE AND RACE

Selection Criteria

Authority : TSHWANE METRO POLICE(4046)
 Period : 01/01/2006 - 31/12/2006
 Province : All Provinces
 Route : All Routes
 Road : All
 Section : All
 Node : All

Age group	Severity	Asian	Black	Coloured	White	Other	Total
0-5	Unknown	148	2081	86	2056	18370	22741
	Killed	2	83	4	28	28	145
	Serious	21	790	27	246	151	1235
	Slight	51	1354	36	607	278	2326
	No injury	232	2972	100	3321	1114	7739
	Unknown	0	0	0	0	2	2
	Sub-total	454	7280	253	6256	19943	34188
6-10	Unknown	0	8	2	12	37	59
	Killed	0	3	0	0	0	3
	Serious	1	25	2	3	3	34
	Slight	2	42	3	28	4	79
	No injury	1	12	0	26	2	41
	Sub-total	4	90	7	69	46	216
11-15	Unknown	0	13	1	20	52	86
	Killed	1	0	0	0	0	1
	Serious	0	25	1	6	2	34
	Slight	4	49	2	61	9	125
	No injury	3	21	2	73	9	108
	Sub-total	8	108	6	160	72	354
16-20	Unknown	18	71	10	420	538	1057
	Killed	1	3	0	11	4	19
	Serious	2	67	9	91	1	170
	Slight	22	125	9	649	33	838
	No injury	121	368	55	2638	237	3619
	Unknown	0	0	0	1	0	1
	Sub-total	164	634	83	4010	813	5704
21-25	Unknown	45	449	21	714	1256	2485
	Killed	1	9	0	18	1	29
	Serious	4	135	5	95	20	259
	Slight	59	426	23	960	79	1547
	No injury	314	3102	170	5362	568	9516
	Unknown	0	1	0	1	0	2
	Sub-total	423	4122	219	7150	1924	13838
26-35	Unknown	88	1581	54	1131	2307	5161
	Killed	2	27	1	14	4	48
	Serious	11	321	8	138	37	515
	Slight	81	1328	62	1274	155	2900
	No injury	651	11043	434	7735	1183	21046
	Sub-total	833	14300	559	10292	3686	29670
36-45	Unknown	61	1198	30	887	1526	3702
	Killed	1	14	0	6	1	22
	Serious	5	210	12	114	15	356
	Slight	49	876	46	940	93	2004
	No injury	430	8114	294	6385	937	16160
	Unknown	0	1	0	0	0	1
	Sub-total	546	10413	382	8332	2572	22245

Records Printed : 59
 Date Printed : 26/02/2008 9:15:24

Report Name : GEN-CARS
 Version : V4.03
 User : J.P. Maian

CASUALTIES BY AGE AND RACE

Selection Criteria

Authority : TSHWANE METRO POLICE(4046)

Period : 01/01/2006 - 31/12/2006

Road : All

Province : All Provinces

Section : All

Route : All Routes

Node : All

Age group	Severity	Asian	Black	Coloured	White	Other	Total
46-55	Unknown	37	753	23	554	876	2243
	Killed	0	11	0	6	2	19
	Serious	3	122	4	70	10	209
	Slight	14	510	21	542	42	1129
	No injury	247	5024	163	4342	631	10407
	Sub-total	301	6420	211	5514	1561	14007
56-65	Unknown	12	239	7	359	372	989
	Killed	0	4	0	5	0	9
	Serious	2	47	0	40	3	92
	Slight	17	147	6	291	18	479
	No injury	108	1486	47	2591	291	4523
	Sub-total	139	1923	60	3286	684	6092
66-75	Unknown	6	29	1	152	133	321
	Killed	1	0	0	2	1	4
	Serious	0	9	0	24	1	34
	Slight	1	26	1	124	6	158
	No injury	39	187	9	1195	96	1528
	Sub-total	47	251	11	1497	239	2045
> 75	Unknown	1	2	0	64	65	132
	Killed	0	0	0	1	0	1
	Serious	1	9	0	6	1	17
	Slight	0	11	0	51	3	65
	No injury	7	31	1	415	36	490
	Sub-total	9	53	1	537	105	705
TOTAL	Unknown	416	6424	235	6369	25532	38976
	Killed	9	154	5	91	41	300
	Serious	50	1760	68	833	244	2955
	Slight	300	4894	209	5527	720	11650
	No injury	2153	32360	1275	34283	5106	75177
	Unknown	0	2	0	2	2	6
	TOTAL	2928	45594	1792	47105	31645	129064

Records Printed : 59

Date Printed : 26/02/2008 9:15:24

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Version : V4.03

User : J.P. Malan

CASUALTIES BY AGE AND RACE

Selection Criteria

Authority : TSHWANE METRO POLICE(4046)

Period : 01/01/2007 - 31/12/2007

Road : All

Province : All Provinces

Section : All

Route : All Routes

Node : All

Age group	Severity	Asian	Black	Coloured	White	Other	Total
0-5	Unknown	173	2377	82	2191	20448	25271
	Killed	1	84	3	30	21	139
	Serious	12	696	29	248	123	1108
	Slight	36	1126	33	599	193	1987
	No injury	255	3206	114	3186	928	7669
	Sub-total	477	7489	261	6234	21713	36174
6-10	Unknown	0	9	0	14	52	75
	Killed	0	2	0	0	0	2
	Serious	0	26	1	4	3	34
	Slight	1	44	3	16	1	65
	No injury	1	6	0	16	3	26
	Sub-total	2	87	4	50	59	202
11-15	Unknown	1	11	1	27	50	90
	Killed	0	1	0	0	0	1
	Serious	0	26	0	6	1	33
	Slight	1	50	1	31	2	85
	No injury	4	19	2	76	5	106
	Sub-total	6	107	4	140	58	315
16-20	Unknown	28	147	9	569	629	1382
	Killed	0	1	0	1	1	3
	Serious	4	38	1	87	9	139
	Slight	18	116	6	572	39	751
	No injury	104	393	42	2649	228	3416
	Unknown	0	0	0	2	0	2
	Sub-total	154	695	58	3880	906	5693
21-25	Unknown	80	746	39	986	1485	3336
	Killed	1	3	0	7	1	12
	Serious	10	140	7	145	17	319
	Slight	46	548	34	964	61	1653
	No injury	331	3206	151	4981	464	9133
	Unknown	0	1	0	1	2	4
	Sub-total	468	4644	231	7084	2030	14457
26-35	Unknown	123	2591	77	1407	2724	6922
	Killed	2	19	1	9	2	33
	Serious	9	376	13	157	25	580
	Slight	106	1335	64	1212	137	2854
	No injury	577	11339	380	7020	1019	20335
	Unknown	0	1	0	0	0	1
	Sub-total	817	15661	535	9805	3907	30725
36-45	Unknown	112	1913	57	1167	1892	5141
	Killed	0	18	1	11	1	31
	Serious	7	236	5	93	14	355
	Slight	47	881	49	903	67	1947
	No injury	365	8312	299	6125	806	15907
	Unknown	0	1	0	0	0	1
	Sub-total	531	11361	411	8299	2780	23382

Records Printed : 57

Date Printed : 26/02/2008 9:20:15

Report Name : GEN-CARS

Version : V4.03

User : J.P. Malan

CASUALTIES BY AGE AND RACE

Selection Criteria

Authority : TSHWANE METRO POLICE(4046)
Period : 01/01/2007 - 31/12/2007
Province : All Provinces
Route : All Routes
Road : All
Section : All
Node : All

Age group	Severity	Asian	Black	Coloured	White	Other	Total
46-55	Unknown	40	1192	36	767	1123	3158
	Killed	0	6	0	2	0	8
	Serious	2	113	6	68	4	193
	Slight	27	489	18	550	46	1130
	No injury	231	5250	148	4122	545	10296
	Sub-total	300	7050	208	5509	1718	14785
56-65	Unknown	31	363	14	458	504	1370
	Killed	0	4	0	3	0	7
	Serious	1	54	1	45	4	105
	Slight	8	158	4	298	29	497
	No injury	117	1641	55	2545	259	4617
	Sub-total	157	2220	74	3349	796	6596
66-75	Unknown	9	55	3	216	190	473
	Serious	1	11	0	12	3	27
	Slight	4	30	1	121	7	163
	No injury	41	217	14	1237	94	1603
		Sub-total	55	313	18	1586	294
> 75	Unknown	1	5	1	79	85	171
	Serious	0	12	0	16	0	28
	Slight	1	14	0	36	6	57
	No injury	13	42	1	418	27	501
		Sub-total	15	73	2	549	118
TOTAL	Unknown	598	9409	319	7881	29182	47389
	Killed	4	138	5	63	26	236
	Serious	46	1728	63	881	203	2921
	Slight	295	4791	213	5302	588	11189
	No injury	2039	33631	1206	32355	4378	73609
	Unknown	0	3	0	3	2	8
		TOTAL	2982	49700	1806	46485	34379