

#### FEDERAL ROAD SAFETY CORPS NATIONAL HEADQUARTERS, ABUJA

#### POLICY, RESEARCH AND STATISTICS DEPARTMENT



# **THE PATHFINDER**

### A Transport Digest Publication of PRS Department

Vol. IV, January, 2014

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#### EDITORIAL BOARD



#### FROM THE PUBLISHER

Regular focus on road crash trends and its reportage have helped influenced policy making in the Corps. The commencement of the publication "Traffic Digest" by Policy Research and Statistics (PRS) Department in the last quarter of year 2013 has no doubt enriched Staff knowledge on road traffic matters and crash data available in the Corps.

To sustain the momentum gained by this publication, the Department (PRS) presents to its numerous readers and Staff the January, 2014 edition which spotlights statistics and data on crashes and figures along roads and routes in Nigeria. Also, Road Traffic Crash data recorded along the 18 Operational Corridors of FRSC in Nigeria and around the 6 World Bank designated Corridors were brought to light especially for the period 2010-2013.

The Corps saw the need to assess the impact and influence on the general public and road users in the country the Toll-Free number "122" which was introduced to ameliorate the difficulties encountered by members of the public in reportage of road crashes as well as improve response to scene of road crashes. Another area of importance as included in this digest was to look into the future and forecast to obtain a likelihood of road crashes in Nigeria using multivariate analysis based on current road crash statistics and trend. You will find the results of these findings and assessment as contained in this edition of the Digest as highly revealing.

As you flip through this 84 paged document, kindly avail yourself the piquant and refreshing information contained therein, as the February edition is just a few days from now.

Happy reading!

Kayode OLAGUNJU, Ph.D

#### FROM THE EDITOR-IN-CHIEF

Congratulations! We have all made it to the New Year. Our first edition of the digest in 2014 is here, and we serve you hot and fresh. Our focus is on the core of our job. We are looking at the FRSC operations corridors and World Bank interventions corridors which are 18 and 6 respectively.

We are analyzing RTC data on the operations corridors and World Bank intervention corridors with the aim to ascertain the types of crashes recorded on these corridors and to understand the trend thereof and with the intent of knowing what further strategies to develop. The information available in this report is highly illuminating and I am sure you will enjoy it.

The efforts of the Management of the Corps at satisfying the yearnings of the citizens in terms of Emergency Response are another focus of this digest. The Policy, Research, and Statistics department has researched into the use by the public the Emergency Toll Free Line 122 made available by the Corps. The report of the research is presented here in the digest.

A contribution from the Senior Associate Editor, Chief Route Commander ST Adebayo on Safe driving techniques in Inter/Intra-Urban Traffic environment/Safety equipment in modern automobiles which provided further insight into Air-Bag/Supplementary Restraint System (SRS), Side Impact Protection System (SIPS) among many other useful automobile safety systems is included to enrich you greatly.

We wish you a fruitful year ahead. You are welcome to our world.

OR Salam

Assistant Corps Commander.

#### ROUTES ANALYSIS DATA, JANUARY 2014

		Total			
5/No.	Route	Injured	Total Killed	Total Involved	No.RTC
1	9THMILE-NSUKKA	25	2	72	8
2	9TH MILE-ONITSHA	9	2	14	3
3	ABA-PORTHARCOURT	26	0	71	8
4	ZUBA-KADUNA	41	8	78	9
5	ABAJI-LOKOJA	10	0	30	5
6	ABAJI-TOTO	13	2	16	2
7	ABAJI-YANGOJI	77	7	149	21
8	ABEOKUTA-LAGOS	12	0	20	2
9	ABEOKUTA-SAGAMU	4	1	6	2
10	ABUJA-GIRI JUNCTION	11	3	56	17
11	ABUJA-KUBWA	37	4	121	31
12	AHODA-PORTHARCOURT	3	4	10	2
13	AKWANGA-LAFIA	16	2	39	8
14	AKURE-IPETU	10	4	36	4
15	AKURE-OWO	36	2	62	10
16	ALIADE-MAKURDI	19	0	21	5
17	ALKELERI-BAUCHI	5	3	22	4
18	ALKELERI-GOMBE	57	6	71	7
19	ANKPA-AYANGBA	3	11	14	1
20	ASABA-BENIN	24	3	37	7
21	AWKA-ENUGU	21	4	78	11
22	AWKA-NTEJE	3	1	4	1
23	AZARE-JAMA	9	3	12	2
24	AZARE-POTISKUM	10	2	20	3
25	BAUCHI-DAS	13	3	29	3
26	BAUCHI-KANO	6	3	9	1
27	BAUCHI-MAIDUGURI	5	2	11	2
28	BENIN-ORE	40	3	82	6
29	BENIN-ASB	17	1	23	4
30	BYR-KAD	14	3	38	5
31	BYR-ZAR	33	3	73	10
32	DRZ-KARI	31	8	46	4
33	ENUGU-9TH MILE	15	3	27	6
34	ENUGU-OKIGWE	15	1	17	1
35	ENUGU-PORTHARCOURT	1	3	5	1
36	FUNTUA-SOKOTO	3	11	14	2
37	GBONGAN-IBADAN	30	8	69	8
38	GBONGAN-OSHOGBO	2	1	5	1

39	GOMBE-YOLA	26	2	32	7
40	GUMEL-KANO	15	9	26	2
41	GUMEL-MAIDUGURI	19	3	22	
42	GEREI-JEMETA	12	0	30	7
43	GEREI-SNG	9	4	19	3
44	GWAGWALADA-YANGOJI	22	2	38	10
45	GWANTU-FOREST	6	1	7	1
46	HAWANKIBO-JOS	33	4	77	11
47	HONG-MUBI	20	1	27	7
48	IBADAN-IJEBU ODE	3	0	3	1
49	LAGOS-IBADAN	43	14	118	19
50	IKOM-OBODU	6	3	10	3
51	ILESHA-ILE IFE	28	0	40	3
52	ITUA - CALABAR	10	10	57	6
53	IJEBU ODE-SGM	17	4	24	4
54	KABBA-OKENE	6	2	8	1
55	KADUNA-DUGUN KUKA	38	4	93	2
56	KANO-ZARIA	47	4	90	13
57	KEFFI-BARDE	44	10	71	11
58	KEFFI-GARKI	17	2	33	7
59	KEFFI-NASARAWA	12	1	19	7
60	KEFFI-NYANYAN	16	2	31	8
61	KOTONKARFE-ABAJI	17	9	32	4
62	KOTONKARFE-LOKOJA	3	1	4	1
63	KALTUNGU-NUMAN	55	12	81	4
64	ILORIN-NEW JEBBA	5	12	17	1
65	MAGONGO-IBILLO	10	5	25	2
66	MAKURDI-ALIADE	22	3	42	11
67	MAKURDI-LAFIA	17	2	21	6
68	NASARAWA EGGON-LAFIA	15	3	26	5
69	NKALAGUA-AKL	29	5	35	3
70	NKALAGUA-ENUGU	22	5	28	3
71	NUMAN-KALTUNGU	10	4	17	2
72	NUMAN-YOLA	17	2	48	5
73	OKENE-AJAOKUTA	9	9	18	1
74	ORE-IJEBU ODE	13	3	33	3
75	ORE-LAGOS	11	2	18	2
76	ORE-ONDO	5	3	11	3
77	OWO-IKARE	7	2	34	3
78	OWERI-UMUAHIA	14	8	34	3
79	POTISKUM-DAMATURU	14	11	26	3

80	WUDIL-BAUCHI	12	13	38	4
81	WUDIL-KANO	48	10	95	6
82	WARRI-PATANI	4	10	14	1
83	YANGOJI-ABAJI	42	5	88	17
84	ZARIA-CHIROMAWA	10	8	21	2
85	ZARIA-FUNTUA	15	7	38	4
86	ZARIA-KADUNA	19	2	46	8
87	ZARIA-KANO	18	4	32	7







#### DAILY RTC DATA (1-31 JANUARY, 2014)

5/No.	Date	Total Injured	Total Killed	Total Involved	No. RTC
1	1/1/2014	150	19	260	43
2	2/1/2014	156	28	292	42
3	3/1/2014	110	28	227	37
4	4/1/2014	165	30	385	46
5	5/1/2014	149	34	388	44
6	6/1/2014	162	26	279	40
7	7/1/2014	117	33	270	45
8	8/1/2014	139	39	273	34
9	9/1/2014	80	23	146	32
10	10/1/2014	82	17	190	36
11	11/1/2014	85	18	180	34
12	12/1/2014	160	68	283	40
13	13/1/2014	110	21	274	41
14	14/1/2014	68	18	128	23
15	15/1/2014	72	22	165	35
16	16/1/2014	117	4	253	35
17	17/1/2014	64	10	154	28
18	18/1/2014	72	14	172	31
19	19/1/2014	129	29	264	37
20	20/1/2014	101	9	192	34
21	21/1/2014	83	20	170	25
22	22/1/2014	83	17	246	28
23	23/1/2014	83	12	149	33
24	24/1/2014	98	14	157	33
25	25/1/2014	106	12	245	37
26	26/1/2014	113	18	234	39
27	27/1/2014	102	11	215	32
28	28/1/2014	74	18	150	25
29	29/1/2014	19	6	68	15
30	30/1/2014	100	18	221	26
31	31/1/2014	69	16	123	29







#### HOURLY INTERVAL RTC DATA (1-31 JANUARY, 2014)

5/No.	TIME	Total Injured	Total Killed	Total Involved	No. RTC
1	0000-0059HRS	17	6	30	5
2	0100-0159HRS	35	24	75	7
3	0200-0259HRS	6	13	21	3
4	0300-0359HRS	38	8	71	10
5	0400-0459HRS	53	5	135	7
6	0500-0559HRS	28	17	68	18
7	0600-0659HRS	45	21	174	18
8	0700-0759HRS	113	40	265	50
9	0800-0859HRS	160	29	331	62
10	0900-0959HRS	175	31	388	68
11	1000-1059HRS	189	31	400	81
12	1100-1159HRS	206	30	489	80
13	1200-1259HRS	248	19	494	71
14	1300-1359HRS	232	50	529	77
15	1400-1459HRS	371	84	702	92
16	1500-1559HRS	237	38	535	85
17	1600-1659HRS	281	26	441	65
18	1700-1759HRS	226	36	430	75
19	1800-1859HRS	285	35	491	64
20	1900-1959HRS	101	31	206	42
21	2000-2059HRS	91	17	232	36
22	2100-2059HRS	59	42	162	24
23	2200-2259HRS	11	1	24	6
24	2300-2359HRS	1	13	21	4







## FRSC 18 OPERATIONS CORRIDORS AND WORLD BANK 6 CORRIDORS RTC ANALYSIS FROM 2010 TO 2013

#### A. INTRODUCTION

The 18 (eighteen) corridors are the FRSC Operational ones. These corridors are different from the 6(six) World Bank Corridors. That is they are mutually exclusive.

#### B. THE CORRIDORS

#### a. EIGHTEEN FRSC OPERATIONAL CORRIDORS

- i. Ojota-Mowe-Sagamu-Ogere-Oluyole-Ibadan Corridor
- ii. Sagamu-Ijebu Ode-Ore-Benin Toll Gate-Agbor-Issele Uku-Onitsha-Nteje-Akwa
- iii. Gwagwalada-Yangoji-Abaji-Kotonkarfe-Lokoja-Zariagi

iv. Nyanya-Keffi-Hawankibo-Plateau-Toro-Bauchi-Alkaleri-Gombe-Kaltungo-Numan-Yola-Girei-Hong

v. Abuja-Kubwa-Suleja-Sabon Wuse-Kakau-Kaduna-Birnin Yero-Zaria-Chiromawa-

Kano

vi. Mokola-Oyo-Atiba-Ogbomoso-Olooru-Bode Saadu-Jebba-Mokwa-Birnin Gwari-

#### Kaduna

- vii. Iwo Road(Oyo Sector)-Egbeda-Ife-Ilesha-Ipetu Ijesha-Ondo-Owo
- viii. Benin-Sapele-Warri-Ughelli-Sagbama-Ahoada
- ix. Enugu-Okigwe-Aba-Portharcourt
- x. Lafia-Langtang-Pankshin-Jos
- xi. Jos-Saminaka-Kaduna
- xii. Maiduguri-Biu-Numan-Jalingo-Wukari-Katsina Ala-Ogoja
- xiii. Bauchi-Darazo-Dogon Kuka-Potiskum-Damaturu-Benishek-Maiduguri
- xiv. Kishi-Ilorin-Omuaran-Isanlu-Kabba-Ankpa-Oturkpo
- xv. Katsina-Kano-Wudil-Dutse-Azare-Potiskum
- xvi. Kotangora-Birnin Kebbi-Sokoto
- xvii. Katsina-Funtua-Zaria
- xviii. Onitsha-Njaba-Owerri-Umuahia-Arochukwu

#### **b. SIX WORLD BANK CORRIKDORS**

These are the Corridors attracting World Bank support on interventions. The Corridors are:

- i. Abuja-Kaduna-Zaria-Kano Corridor
- ii. Benin-Ifon-Akure-Ilesha Corridor
- iii. Mokwa-Bida-Lambata-Suleja Corridor
- iv. Jos-Bauchi-Gombe Corridor
- v. Enugu-Abakaliki- Ikom—Mfum Corridor
- vi. Abuja Metropolis

#### C. METHOD OF DATA COLLECTION

The affected commands were requested to send in the RTC statistics (backed with details) along the routes within their commands as there was no immediate available data in the Department. A special template was designed for this purpose.

#### D. EIGHTEEN (18) OPERATIONAL CORRIDORS RTC STATISTICS AND AVERAGE TRAFFFIC VOLUME PER HOUR 2010-2013

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route (E.G Km 2, Lagos-Ibadan Road.)
2010	87	209	75	374	176	1290	1466	1539	2984	13766	Lagos-Ibadan/ Ibadan-Lagos
2011	99	266	43	408	183	1430	1613	1704	3276	14212	Lagos-Ibadan/ Ibadan-Lagos
2012	93	259	50	403	149	1516	1665	1745	3408	16754	Lagos-Ibadan/ Ibadan-Lagos
2013	84	188	23	294	176	1103	1279	1429	2665	16987	Lagos-Ibadan/ Ibadan-Lagos

#### 1. OJOTA-MOWE-SAGAMU-OGERE-OLUYOLE-IBADAN CORRIDOR



A cursory look at the trend of RTC shows that the total case is reducing. In 2013 RTC reduced by 21% over 2010 figure even with the increase in Average Traffic volume per hour by 23%. There is relative stability in the number killed over the years. Though there is a significant increase of about 18% in 2013 over 2012.

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	185	510	122	798	330	2,898	3,228	3,548	6,505	6,435	MOSOGAR/SPL- BEN
2011	251	472	154	884	556	3,149	3,701	4,684	8,060	7,867	MOSOGAR/SPL- BEN
2012	388	630	253	1,222	1,053	2,809	3,762	5,227	8,429	8,145	MOSOGAR/SPL- BEN
2013	356	572	161	1,085	769	3,103	3,872	5,127	8,563	9,257	MOSOGAR/SPL- BEN

#### 2. SAGAMU-IJEBU ODE-ORE-BENIN TOLL GATE-AGBOR-ISSELE UKU-ONITSHA-NTEJE-AKWA



RTC CASES WITH PERSONS KILLED AND INJURED BETWEEN

2010 - 2013 ALONG SAGAMU-IJEBU ODE-ORE-BENIN TOLL



RTC increased tremendously with 35% in 2013 over 2010. However there is a slight decrease of 11.2% in 2013 compared to 2012. Average Traffic Volume per hour increased from 6435 in 2010 to 9257 in 2013 representing 44% increase. The decrease in RTC in 2013 over 2012 could be attributed to the rehabilitation of Sagamu-Ijebu ode-Ore-Benin toll gate end of the road.

#### 3. GWAGWALADA-YANGOJI-ABAJI-KOTONKARFE-LOKOJA-ZARIAGI

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	58	203	62	323	120	926	1046	1072	2118	2729	SDP JUNCT. ABJ- LKJ
2011	75	155	112	341	173	1133	1306	1686	2949	2800	SDP JUNCT. ABJ- LKJ
2012	64	198	35	307	123	775	898	973	1836	3700	SDP JUNCT. ABJ- LKJ
2013	66	187	43	296	140	833	973	1226	2136	3958	SDP JUNCT. ABJ- LKJ





Total RTC decreased from 323 in 2010 to 296 in 2013. This represents 8.3% decrease despite the increase in traffic volume. However, number killed increased over the years. That is 17% increase in 2013 over 2010 and 14% increase in 2013 over 2012. Though, the increase in 2011 figures over 2010 in this corridor could be attributed to under reporting in 2010 as no record from Abaji Unit Command on Abaji - Yangoji route.

The apparent increase in number killed could be attributed to the ongoing Dualization of the road. The fatal nature of RTC along the route may be due to lack of adequate construction warning signs and associated speed among drivers.

#### 4. NYANYA-KEFFI-HAWANKIBO-PLATEAU-TORO-BAUCHI-ALKALERI-GOMBE-KALTUNGO-NUMAN-YOLA-GIREI-HONG

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	59	345	49	453	107	1104	1211	1091	2302	426	KARU JUNCT, ABUJA-KEFFI
2011	75	341	44	500	133	1276	1409	1125	2534	428	KARU JUNCT, ABUJA-KEFFI
2012	70	312	44	426	110	1088	1200	799	2000	446	KARU JUNCT, ABUJA-KEFFI
2013	78	349	23	457	133	1432	1565	814	2365	455	KARU JUNCT, ABUJA-KEFFI



RTC along the route decreased except in 2011 where it increased by 10% in 2011 over 2010. The traffic volume is relatively stable.

#### 5. ABUJA-KUBWA-SULEJA-SABON WUSE-KAKAU-KADUNA-BIRNIN YERO-ZARIA-CHIROMAWA-KANO

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	448	365	168	693	393	2214	2614	1795	4427	1615	7KM ZAR-CMW
2011	186	485	167	838	354	2771	2855	2091	4946	1720	7KM ZAR-CMW
2012	169	893	373	1435	316	2804	3120	1948	5068	1860	7KM ZAR-CMW
2013	201	823	287	1311	409	2995	3407	1912	5316	2400	7KM ZAR-CMW



Total RTC cases increased from 693 in 2010 to 1311 in 2013. That is 89% increase. However, it decreased slightly by 8.6% from 1435 in 2012 to 1311 in 2013. Fatality on the route has increased by 4%. The traffic volume has also increased over the years. Zuba and Katari Unit Commands have been created for effective intervention. The road is dualised and has been rehabilitated. The rise in RTC could be attributed to speed and ever increasing traffic volume.

#### 6. MOKOLA-OYO-ATIBA-OGBOMOSO-OLOORU-BODE SAADU-JEBBA-MOKWA-BIRNIN GWARI-KADUNA

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	61	110	37	207	143	769	912	1032	1735	3362	4KM/JEBBA-ILORIN
2011	71	145	39	247	193	788	981	912	1963	4252	4KM/JEBBA-ILORIN
2012	84	100	27	220	208	913	1121	957	1987	3882	4KM/JEBBA-ILORIN
2013	82	84	3	169	171	777	948	658	1610	3972	4KM/JEBBA-ILORIN



In this corridor, RTC decreased from 207 in 2010 to 169 in 2013 representing a decrease of 18%. The number killed increased by 45%. That is from 143 in 2010 to 208 in 2012. Moreover, a downward trend is observed in 2013 over 2012 in the number killed (18%). The traffic volume has also increased consistently over the years. There was approximately 29% increase in 2013 over 2010.

#### 7. IWO ROAD(OYO SECTOR)-EGBEDA-IFE-ILESHA-IPETU IJESHA-ONDO-OWO

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	118	186	31	366	305	1,685	1,997	1,057	3,054	11,202	(KM2) AUCHI-BENIN
2011	123	174	39	336	288	1,597	1,885	1,162	3,047	13,116	(KM2) AUCHI-BENIN
2012	141	200	41	382	253	1,665	1,918	1,485	3,403	13,939	(KM2) AUCHI-BENIN
2013	148	132	11	291	278	1,181	1,452	896	2,348	14,475	(KM2) AUCHI-BENIN



RTC figure decreased from 2010 to 2013 which could be as a result of special interventions by Federal Ministry of Works with the installation of Speed breakers in 2011 at Rufus Giwa Polytechnic, Uso Town & Isuga Junction in 2012 and Emure Ile Junction & Ogbese Town in 2013 all along the Owo-Akure-Ilesha routes. However, in 2012 RTC increased by 23.8% over 2011 figure. The traffic volume increased by 29% from 2010 to 2013. Generally, Number killed decreased over the years except, in 2013 where a slightly increased of 10% was recorded over 2012 figure. The road is not dualised from Ilesha to Owo. The entire Corridor needs rehabilitation. This will help to effect a significant reduction in total RTC and number of persons killed. Considering the traffic volume along the route, there is need to dualise the remaining expansion of the road (Ilesha to Owo).

#### 8. BENIN-SAPELE-WARRI-UGHELLI-SAGBAMA-AHOADA

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	66	208	53	254	87	1,078	844	793	1,638	9378	UGH/WWR By Afisere
2011	61	212	71	268	105	641	742	990	4,617	9808	UGH/WWR By Afisere
2012	94	246	83	311	146	740	886	1,419	2,307	10293	UGH/WWR By Afisere
2013	104	147	46	191	171	500	671	692	1,393	10,756	UGH/WWR By Afisere



Total RTC decreased by 46% from 354 in 2010 to 191 in 2013. However, a 16% increase was recorded in 2012 over 2011 figure. The traffic volume has also increased over the years with 15% increase in 2013 over 2010 figure. Number killed is progressively increasing from 87 in 2010 to 171 in 2013. Notably, Benin-Sapele-Warri-Ughelli end of the road is dualised and very motorable. While, the Ughelli-sagbama-Ahoada end of the road is undergoing extensive construction.

The high fatality along this Corridor needs to be investigated to know the section of the road involved and probable cause of RTC for any meaningful intervention.

#### 9. ENUGU-OKIGWE-ABA-PORTHARCOURT

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route (E.G Km 2, Lagos-Ibadan Road.)
2010	8	13	10	31	16	87	96	61	157	216	OK-UMH/ UMH-OK
2011	27	44	13	84	36	305	341	274	615	334	OK-UMH/ UMH-OK
2012	15	36	12	63	35	198	233	189	422	398	OK-UMH/ UMH-OK
2013	23	70	22	115	94	289	323	297	620	422	OK-UMH/ UMH-OK



Total RTC is progressively increasing from 31 in 2010 to 115 in 2013, resulting to an increase of 270%. Also, fatality is also on the increase from 16 in 2010 to 94 in 2013 representing 487%. The road has been bad and there an ongoing rehabilitation along the corridor. Traffic volume is relatively low and stable over the years, an average of 216 per hour in 2010 and increased to 422 in 2013 representing 95% increase. There is also the need to find out why RTC and fatality are increasing despite the low traffic density in this corridor.

#### 10. LAFIA-LANGTANG-PANKSHIN-JOS

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	16	12	4	34	37	113	150	37	187	14	Lafia-Shendam
2011	7	16	0	23	13	87	100	13	113	16	Lafia-Shendam
2012	13	41	3	56	25	149	174	96	267	18	Lafia-Shendam
2013	21	65	4	90	31	204	235	149	384	19	LAFIA-SHENDAM



There was upward trend in Total RTC from 34 in 2010 to 90 in 2013 i.e 165% increase. Total tread in fatality is fluctuating but tilted to a relatively increase of 138% from 2011 to 2013. Fatality dropped in 2011 but with a steady increase up to 2013. The traffic volume is very low with average of 14 vehicles per hour in 2010 and rose up to 19 vehicles per hour representing 36%.

#### 11. JOS-SAMINAKA-KADUNA

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	30	36	4	62	48	170	223	166	374	321	(5KM SNK-JOS- KAD)
2011	10	31	7	50	17	139	156	110	258	488	(5KM SNK-JOS- KAD)
2012	10	37	9	58	9	171	180	108	286	252	(5KM SNK-JOS- KAD)
2013	16	46	12	84	20	198	218	193	404	414	(5KM SNK-JOS- KAD)





RTC increased from 62 in 2013 to 84 in 2010. This represents an increase in RTC with 35% in 2013 over 2010. Fatality assumed a descent decrease in 2011. It however rose astronomically in 2013 by 122% from 2012 figure (Need to be investigated). Traffic volume is relatively low with 321 per hour in 2010 and 414 per hour in 2013 showing an increase of 29%.

YEAR	FATAL	SERIOUS	MINOR	TOTAL CASES	KILLED	INJURED	TOTAL CASUALTY	NOT INJURED	PERSONS INVOLVED	AVERAGE TRAFFIC VOLUME/PER HOUR	TRAFFIC COUNT POINT/ROUTE
2010	8	62	34	66	11	173	190	90	274	208	KM1, KAL-GBK
2011	34	88	69	84	52	264	436	113	521	875	KM1, KAL-GBK
2012	21	71	7	71	30	210	242	173	413	336	KM1, KAL-GBK
2013	34	48	5	66	55	174	229	239	465	108	KM1, KAL-GBK

#### 12. MAIDUGURI-BIU-NUMAN-JALINGO-WUKARI-KATSINA ALA-OGOJA







Maiduguri-Biu RTC data is not included in this report as the Commands could not be reached for security reasons, so we are restricted to Biu – Numan, Katsina Ala – Gboko and Ogoja – Ikom routes. The total RTC on the remaining segment of the Corridor is relatively stable but with an increase from 66 in 2010 to 84 in 2011. There is a decrease of 15% in 2013 over 2012 figure. The traffic volume is expectedly low but the fatality is increasing along the route.

#### 13. BAUCHI-DARAZO-DOGON KUKA-POTISKUM-DAMATURU-BENISHEK-MAIDUGURI

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	21	60	0	81	37	265	302	284	586	212	Km 5, Darazo-Kari
2011	28	94	7	129	64	499	563	467	960	303	Km 5, Darazo-Kari
2012	22	63	0	85	61	374	435	270	705	298	Km 5, Darazo-Kari
2013	27	50	0	77	71	366	437	190	627	316	Km 5, Darazo-Kari





No. RTC data from Dogon-kuka, Potiskum, Damaturu, Benishek and Maiduguri axis of the Corridor. Bauchi-Darazo route accounts for the above data. Total RTC increased from 81 in 2010 to 129 in 2013.

A downward slide is observed from 2012 to 2013 representing 9% decreases in RTC in 2013 over 2012. Fatality is on the increase with 92% in 2013 over 2010. The traffic volume of 212 vehicles per hour in 2010 increased to 316 vehicles per hour in 2013 representing 49% increase.

#### 14. KISHI-ILORIN-OMUARAN-ISANLU-KABBA-ANKPA-OTURKPO

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	44	103	13	132	116	456	571	330	901	392	ABU KABBA
2011	60	111	19	164	98	582	686	324	1004	393	ABU KABBA
2012	46	104	23	153	78	437	518	347	862	429	ABU KABBA
2013	56	77	26	140	119	469	599	374	967	542	ABU KABBA





**Total** RTC 164 cases increased by 24% in 2011 compared to 2010 figure of 132. Thereafter, a downward trend is observed in total RTC. Fatality (119) increased by 53% in 2013 over 2012 figure of 78 deaths. There was consistent increase in Traffic volume per hour from 2010 with 392 vehicles per hour to 542 vehicles per hour in 2013 representing 38% increase.

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	40	89	6	135	77	143	220	406	934	1681	WUDIL KANO
2011	44	77	3	121	146	600	746	332	1078	1019	WUDIL KANO
2012	41	71	9	120	115	646	761	280	1041	920	WUDIL KANO
2013	36	84	27	132	67	541	608	425	1033	2170	WUDIL KANO

#### 15. KATSINA-KANO-WUDIL-DUTSE-AZARE-POTISKUM



RTC CASES WITH PERSONS KILLED AND INJURED BETWEEN



Generally, the total RTC decreased from 135 in 2010 to 120 in 2012 representing 11% decrease. However a slight increase of 10% was recorded in 2013 over 2012 figure. The traffic volume increased from 1681 per hour to 2170 per hour in 2013 i.e 29% increase possibly from Katsina-Kano-Wudil-Dutse axis. Fatality increased from 77 in 2010 to 146 in 2011 (90%). Thereafter, it assumed a decreasing trend of 113% from 2011 to 2013.

#### 16. KOTANGORA-BIRNIN KEBBI-SOKOTO

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	15	18	14	47	19	99	118	66	184	180	(B/KEBBI-SOKOTO RD)
2011	13	30	14	57	25	171	196	81	277	300	(B/KEBBI-SOKOTO RD)
2012	3	29	9	41	4	60	64	134	198	368	(B/KEBBI-SOKOTO RD)
2013	10	23	4	37	26	89	115	66	181	382	(B/KEBBI-SOKOTO RD)







This corridor witnessed downward trend in Total RTC from 47 in 2010 to 37 in 2013 which accounted for 21% reduction. Fatality increased astronomically in 2013 over 2012 figure by 550%. Traffic volume per hour increased from 180 in 2010 to 382 in 2013 representing 112% increase. There is need to know why the fatality rate is so high despite the low traffic volume and seemingly reduction in RTC.

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	8	16	1	25	35	217	252	45	297	155	KM25, KAD-ZAR
2011	7	19	5	26	2	141	143	11	154	107	KM25, KAD-ZAR
2012	8	15	2	25	12	133	145	57	202	128	KM25, KAD-ZAR
2013	10	11	4	25	20	109	129	28	157	111	KM25, KAD-ZAR

17. KATSINA-FUNTUA-ZARIA





The Total RTC is stable within the neighbourhood of 25 from 2010 to 26 in 2011 representing 4% and 25 cases in both 2012 and 2013. Fatality increased by 94% in 2011(2) over 2010 figure (35) and rose in 2013 with 900% over 2011 figure. The traffic volume per hour decreased from 155 in 2010 to 107 in 2011 (31% decrease). This erratic fluctuation needs to be investigated.

Year	Fatal	Serious	Minor	Total Cases	Killed	Injured	Total Casualty	Not Injured	Persons Involved	Average Traffic Volume/Per Hour	Traffic Count Point/Route
2010	3	7	6	24	7	1	8	40	11	6435	OSHA-AWK
2011	18	26	20	62	22	88	110	214	325	7867	OSHA-AWK
2012	16	36	15	57	13	47	60	9	69	8145	OSHA-AWK
2013	31	70	26	132	63	189	275	376	651	9257	OSHA-AWK

18. ONITSHA-NJABA-OWERRI-UMUAHIA-AROCHUKWU





RTC along this corridor increased progressively from 24 in 2010 to 26 in 2011 and 36 in 2012 and increased tremendously to 132 in 2013. There was an increase of 131% from 2012 to 2013 in total RTC recorded in this corridor .In 2013, fatality increased by 385% over 2012 figure. The Traffic volume per hour also increased from 6435 in 2010 to 9257 accounting for 44%. There is need for an urgent intervention to arrest this trend.

#### E. WORLD BANK CORRIDOR (RTC STATISTICS) 2010-2013

#### 1. ABUJA-KADUNA-ZARIA-KANO CORRIDOR

										AVERAGE	COUNTING POINT
VEAD	FATAL	SEDTOUS	MINOD	TOTAL	VTILED	TNTUDED	TOTAL	NOT	PERSONS	TRAFFIC	
JUAK	TATAL	JURIOUS	MINOR	CASES	NILLLU	INJORED	CASUALTY	INJURED	INVOLVED	VOLUME/PER	
										HOUR	
2010	24	74	19	117	122	509	631	420	691	1390	KM 10, KADUNA - ABUJA ROAD
2011	44	29	25	98	132	474	606	83	689	1456	KM 5, ZARIA - KADUNA ROAD
2012	40	275	143	458	55	396	451	324	775	1623	KM 10, KADUNA - ABUJA ROAD
2013	29	180	97	306	48	419	467	225	692	1676	KM 10, KADUNA - ABUJA ROAD




The corridor experienced a major increase in RTC from 2011 to 2012. A total of 98 and 458 cases were recorded in year 2011 and 2012 respectively indicating a 367% increase. However, in 2013 there was 33% decrease in RTC over 2012. The creation of the new commands is basically to achieve three goals; improved reporting; prompt rescue and reduction of RTC. The observed increase in RTC has led to the justification of inclusion of the road in the World Bank safe corridors project.

Note also that the traffic density on the road is on the increase over the years.

## 2. BENIN-IFON-AKURE-ILESHA CORRIDOR

										AVERAGE	COUNTING POINT
VEAD	FATAL	SEDTOUS	MINOD	TOTAL	VTILED		TOTAL	NOT	PERSONS	TRAFFIC	
JUAK	TATAL	JERIOUS	MINOR	CASES	NILLU	INJURED	CASUALTY	INJURED	INVOLVED	VOLUME/PER	
										HOUR	
2010	70	78	4	152	184	522	706	537	1243	1475	KM 2 AKURE - ILESHA ROAD
2011	51	127	61	239	147	984	1131	735	1866	1591	KM 2 AKURE - ILESHA ROAD
2012	49	118	19	186	133	764	897	846	1743	1672	KM 6 ILESHA - AKURE ROAD
2013	52	104	26	182	128	945	1073	911	1984	1706	KM 6 ILESHA - AKURE ROAD



The Routes along this corridor witnessed increase in RTC in year 2011 (239 cases) over 2010 (152 cases) with 57% increase and subsequently dropped in year 2012 and 2013 i.e. 22% and 23% respectively. There was a downward trend in number of persons killed from 2010 to 2013 representing 30.4% reduction. The reduction in fatality may be attributed to World Bank Safe Corridor intervention with the deployment of patrol vehicles, radar guns and alcoholizer, in November 2012 and ambulances and motor bikes in April 2013.

It is good to note that the traffic volume is also on the increase from 2010 to 2013.

## 3. MOKWA-BIDA-LAMBATA-SULEJA CORRIDOR

										AVERAGE	COUNTING POINT
VEAD	FATAL	SEDTOUS	MINOD	TOTAL	VTILED	TNITUDED	TOTAL	NOT	PERSONS	TRAFFIC	
/L/IK	TATAL	JURIOUS	MINOR	CASES	NILLLU	INJURED	CASUALTY	INJURED	INVOLVED	VOLUME/PER	
										HOUR	
2010	53	33	2	88	182	446	628	699	1327	1356	KM 3 BIDA - MOKWA ROAD
2011	41	108	57	206	208	555	763	771	1534	1391	KM 4 MOKWA - BIDA ROAD
2012	38	65	18	121	164	498	662	790	1452	1522	KM 4 MOKWA - BIDA ROAD
2013	44	83	15	142	121	414	535	977	1512	1643	KM 6 SULEJA - BIDA ROAD



The corridor recorded the highest RTC cases in 2011 representing 134% increase in RTC and 14% increase in person killed over 2010 figure. This resulted in the 2012 intervention which brought down the trend of RTC to 41% when compared with 2011. However, available records show that number of persons killed dropped to 164 and 121 in 2012 and 2013 respectively. This may be attributed to the deployment of ambulance along these corridors.

There is also observed average hourly traffic volume from 2010 to 2013.

YEAR	FATAL	SERIOUS	MINOR	TOTAL CASES	KILLED	INJURED	TOTAL CASUALTY	NOT INJURED	PERSONS INVOLVED	AVERAGE TRAFFIC VOLUME/PER HOUR	COUNTING POINT
2010	93	77	10	180	257	754	1011	338	1349	998	KM 7 JOS - BAUCHI ROAD
2011	39	52	14	105	129	479	608	827	1435	1221	KM 7 JOS - BAUCHI ROAD
2012	28	83	16	127	104	486	590	688	1278	1142	KM 7 JOS - BAUCHI ROAD
2013	25	96	23	144	89	521	610	924	1534	1321	KM 7 JOS - BAUCHI ROAD

## 4. JOS-BAUCHI-GOMBE CORRIDOR



AVERAGE TRAFFIC VOLUME/PER HOUR WITH PERSONS INVOLVED IN RTCS BETWEEN 2010 - 2013 ALONG JOS-BAUCHI-GOMBE CORRIDOR 

Unlike other safe corridors, Jos-Bauchi-Gombe witnessed downward trend of 42% in the number of RTC in year 2011 over 2010. Subsequently, the corridor started recording upward trend till year 2013. However, the upward trend in RTC did not significantly affect fatality trend; rather there was steady reduction in the number fatal crashes and of person killed as reflected on the table and chart above. Apparently, the World Bank safe corridor project equipment are yet to be deployed to the corridor as they were commissioned in late December 2013.

VEAD	FATAI	SEDTOUS	MINOR	TOTAL	KTILED		TOTAL	NOT	PERSONS	AVERAGE TRAFFIC	COUNTING POINT
	TATAL	JERIOUS	MINOR	CASES	KILLUU	INJORCO	CASUALTY	INJURED	INVOLVED	VOLUME/PER	
										HOUR	
2010	26	41	13	80	82	343	425	539	964	3123	KM 3 ENUGU - ABAKALIKI ROAD
2011	40	34	6	80	84	394	478	665	1143	3793	KM 3 ENUGU - ABAKALIKI ROAD
2012	32	47	8	87	72	236	308	681	989	4185	KM 4 ABAKALIKI - ENUGU ROAD
2013	27	65	15	107	67	282	349	674	1023	4312	KM 3 ENUGU - ABAKALIKI ROAD





The corridor recorded slight increase in the number of RTC cases from 2010 to 2013. Available records show an average increase of 34% in the period. Year 2013 recorded a 22% increase in RTC cases over that of 2012. Though the corridor recorded decrease in fatality year on year from 2010 to 2013. This may be attributed to roads rehabilitation along this corridor. However, the World Bank safe corridor intervention is yet to be activated along this corridor. The receipt of operational equipment in late 2013 led to the creation of new Unit Commands. The traffic volume is also on the increase.

### 6. ABUJA METROPOLIS

										AVERAGE	COUNTING
VEAD	FATAL	SEDTOUS		TOTAL	VTILED	TNTUDED	TOTAL	NOT	PERSONS	TRAFFIC	POINT
JUAR		JERI003	MINOR	CASES	NILLLU	TINJUKLU	CASUALTY	INJURED	INVOLVED	VOLUME/PER	
										HOUR	
2010	81	286	169	536	363	1840	2203	431	2634	6432	ABUJA
2011	127	276	72	475	253	1273	1526	927	2453	9243	ABUJA
2012	139	278	114	531	238	1328	1566	2268	3834	10341	ABUJA
2013	147	620	137	904	290	2302	2592	2782	5374	12427	ABUJA

NOTE: The traffic count was conducted along the three (3) major routes leading to Abuja town (i.e. KM 5 Abuja – Gwagwalada road, KM 3 Nyanya – Abuja road and KM 10 Zuba – Abuja road).



Abuja metropolis recorded the highest RTC cases in 2013 this could be attributed to poor road construction traffic management activities, increase traffic volume and improved reporting and rescue activities as more Command and ambulance points were created. Despite increase in TRC there is converse decrease in the number of person killed over the years but with spite in 2013.

# F. CHALLENGES IN HARNESING THE REQUIRED DATA.

- Poor achieving of data; it was observed that data were not properly kept by most commands. It is most likely that Data and records, which are mostly hand written on loose materials, are not handed over to the new officers taking over thereby creating gaps. A typical case is RS7.12 Abaji, where the 2010 records were not available in the command. The Unit Commander could not lay his hands on the records.
- The response to data collection/collation assignments from RSHQ by some officers in the field command is also not encouraging. E-mails were sent with the relevant template to all the Commands along the 18 Corridors for this assignment. These were backed up with many calls and text messages to the commanding officers but the response time was generally poor. Some responded just few days ago.
- Due to the security challenges and the attended GSM network problem in the North Eastern
  part of Nigeria, the Commanding Officers along Corridor 13(Bauchi-Potiskum-Dogon KukaDamaturu-Benishek) could not be reached after the initial e-mail has been sent. Hence only
  RTC data from Bauchi-Darazo route was received and reflected in this corridor.

Despite the challenges, the collated information and resulting Report would assist in appraising the RTC patterns on the road and also provoke the required interventions.

# G. FINDINGS

- 1. RTC and fatality are increasing in the following corridors
- Corridor 5: Abuja-Kubwa-Suleja-Sabon Wuse-Kakau-Kaduna-Birnin Yero-Zaria-Chiromawa-Kano
- Corridor 9: Enugu-Okigwe-Aba-Portharcourt
- Corridor 10: Lafia-Langtang-Pankshin-Jos
- Corridor 11: Jos-Saminaka-Kaduna
- Corridor 18: Onitsha-Njaba-Owerri-Umuahia-Arochukwu
- 2. Fatality is increasing in the following corridors
- Corridor 2: Sagamu-Ijebu Ode-Ore-Benin Toll Gate-Agbor-Issele Uku-Onitsha-Nteje-Akwa
- Corridor 3: Gwagwalada-Yangoji-Abaji-Kotonkarfe-Lokoja-Zariagi
- Corridor 8: Benin-Sapele-Warri-Ughelli-Sagbama-Ahoada
- Corridor 14: Kishi-Ilorin-Omuaran-Isanlu-Kabba-Ankpa-Oturkpo
- Corridor 16: Kotangora-Birnin Kebbi-Sokoto
- Corridor 17: Katsina-Funtua-Zaria
- 3. Traffic count figure in corridor 1 Ojota-Mowe-Sagamu-Ogere-Oluyole-Ibadan is incredibly high.
- 4. Traffic count record in corridor 10 Lafia-Langtang-Pankshin-Jos is incredibly low.

- 5. Sudden and tremendous rise in fatality in corridor 11 Jos-Saminaka-Kaduna , corridor 14 Kishi-Ilorin-Omuaran-Isanlu-Kabba-Ankpa-Oturkpo and corridor 16 Kotangora-Birnin Kebbi-Sokoto.
- 6. It was discovered that interventions through road rehabilitation on Sagamu-Ijebuode-Ore-Benin toll gate end, deliberate efforts to force down speed like installed speed breakers along Owo-Akure-Ilesha road in corridor 7 and increased visibility and intensify of Patrol Operations (e.g Lagos - Ibadan) have impacted in RTC reduction on some of the Corridors.

# H. RECOMMENDATIONS

- i. Special patrol and public enlightenment recommended for these identified corridors with increase in RTC and or Fatality
  - Corridor 5: Abuja-Kubwa-Suleja-Sabon Wuse-Kakau-Kaduna-Birnin Yero-Zaria-
  - Chiromawa-Kano
    - Corridor 9: Enugu-Okigwe-Aba-Portharcourt
    - Corridor 10: Lafia-Langtang-Pankshin-Jos
    - Corridor 11: Jos-Saminaka-Kaduna
    - Corridor 18: Onitsha-Njaba-Owerri-Umuahia-Arochukwu

Fatality is increasing in the following corridors

• Corridor 2: Sagamu-Ijebu Ode-Ore-Benin Toll Gate-Agbor-Issele Uku-Onitsha-Nteje-

## Akwa

- Corridor 3: Gwagwalada-Yangoji-Abaji-Kotonkarfe-Lokoja-Zariagi
- Corridor 8: Benin-Sapele-Warri-Ughelli-Sagbama-Ahoada
- Corridor 14: Kishi-Ilorin-Omuaran-Isanlu-Kabba-Ankpa-Oturkpo
- Corridor 16: Kotangora-Birnin Kebbi-Sokoto
- Corridor 17: Katsina-Funtua-Zaria.

The Special Patrol interventions could be in form of regular Intral-Zonal patrols along such Corridors. However, the RSHQ should assist in funding the intervention especially in terms of fuelling and costs of assembling the operational men.

- ii. Corridor 18 Onitsha-Njaba-Owerri-Umuahia-Arochukwu requires immediate intervention. The ZCOs RS 5 and RS9 should be mandated to come up with innovative patrol strategies and thee commands should be assisted in implementing the strategies if approved by RSHQ.
- iii. There is need for proper investigation of the identified corridors with increasing RTC figures and Fatality to ascertain the root causes for effective intervention.
- iv. Traffic count, to be monitored by RSHQ, is conducted in all the 18 corridors. This is to ensure accuracy as some of the figures supplied by field commands used in the analysis appeared to be inconsistent and far from reality. This will help in proper analysis of RTC in relation to traffic volume for each route.
- v. Route assessment/Audit should be carried out in all the 18 corridors. This will help in optimal deployment of personnel during subsequent special patrols.

- vi. The recent acquisition and distribution of Desktop computers to Departments and zones is a good development. It should be extended to Sectors and units PRS desk officers for effective data storage and retrieval as at and when needed.
- vii. There is also need to determine the Average Speed along the 18 corridors. This will also help to determine the effect of speed on RTC occurrences along the routes.
- viii. Archiving of data should be taken more seriously by all Commands and details uploaded to RSHQ PRS. All Commands should be mandated to retrieve and build data bank for years back and upload same to RSHQ PRS while PRS Department will come up with the required templates. Commands should be warned that doctoring data will attract strict sanctions as the PRS has commenced investigation of supplied data. No Commands should release any Road Traffic Crash or Traffic Count data to the public or researchers until it has been verified and approved by the PRS Department, RSHQ.
- ix. There is need for further investigation of the factors responsible for the RTC and traffic density on the World Bank Corridors.
- x. There should be periodic evaluation of the RTC, Road Audit and traffic count records on the World Bank Corridors. Our interventions must be subjected to periodic appraisals.

# ASSESSMENT OF THE FRSC EMERGENCY TOLL FREE LINE 122

# A. INTRODUCTION

In order to enhance the response of FRSC Rescue activities, a toll free emergency number 122 was launched by the Corps. The introduction of the Emergency toll free line is to aid in rapid response to road traffic crashes in order to reduce the number of fatalities on the road. The 3-digit number is also to help the public report bad use of the road and road conditions. The launching was performed by the Honourable Minister of Health; Prof. Onyebuchi Chukwu on Monday 9<sup>th</sup> July, 2012 at the FRSC National Headquarters, Abuja.

## B. AIM AND OBJECTIVES

i. AIM

The aim of the research is to appraise the use of the Emergency Number 122.

# ii. OBJECTIVES

The objectives are:

- a) To ascertain the awareness level of the populace on the Emergency Number.
- b) To study the usage of the Number by road users to call for help for victims.
- c) To identify challenges facing the use of the Number.
- d) To evolve strategies that will lead to improvement in the effectiveness of the Emergency Number.

# C. METHODLOGY

- Questionnaires were distributed in all the states of the federation randomly. The Sector and unit commands were the focal points. A total of 1,434 questionnaires were admissible.
- Simple descriptive statistics and charts were employed in the analysis.
- Statistical packages like SPSS and Microsoft Excel were used in running the analysis.

## D. CHALLENGES

The following challenges were encountered:

> The response to assignments on data collection from field commands is very low. It took several weeks to get the data collated and some commands did not follow the administrative instructions. The last set of questionnaires came in few hours ago.

> There is also the problem of credibility in some of the questionnaires as many that claimed they had never called 122 before, were reported to have rated the response of the operators.

Despite the challenges, the exercise is still a good way of appraising the functionality and awareness rating of the FRSC emergency number 122.

# E. ANALYSIS

Below is the report of the analysis:

					RE	SPONDEN	ITS PROF	ILE							
_	TOTAL		GE	NDER						AGE OF R	ESPONDE	NTS			
STATE	QUESTIONNAIRES ADMISSIBLE	MALE	%	FEMALE	%	18-25	%	26-35	%	36-45	%	46-55	%	ABOVE 56	%
ABIA	18	13	86.7%	2	13.3%	2	11.1%	9	50.0%	2	11.1%	3	16.7%	2	11.1%
ADAMAWA	25	17	70.8%	7	29.2%	0	0.0%	9	39.1%	10	43.5%	4	17.4%	0	0.0%
AKWA IBOM	40	29	72.5%	11	27.5%	1	2.5%	14	35.0%	14	35.0%	10	25.0%	1	2.5%
ANAMBRA	26	19	79.2%	5	20.8%	6	23.1%	11	42.3%	6	23.1%	3	11.5%	0	0.0%
BAUCHI	40	33	84.6%	6	15.4%	3	7.5%	20	50.0%	13	32.5%	4	10.0%	0	0.0%
BAYELSA	25	20	83.3%	4	16.7%	1	4.2%	11	45.8%	10	41.7%	2	8.3%	0	0.0%
BENUE	36	22	81.5%	5	18.5%	4	11.1%	12	33.3%	12	33.3%	8	22.2%	0	0.0%
CROSS RIVER	35	26	74.3%	9	25.7%	3	20.0%	16	106.7%	10	66.7%	6	40.0%	0	0.0%
DELTA	40	24	60.0%	16	40.0%	3	8.6%	18	51.4%	11	31.4%	8	22.9%	0	0.0%
EBONYI	69	55	84.6%	10	15.4%	14	35.0%	34	85.0%	10	25.0%	6	15.0%	3	7.5%
EDO	50	45	90.0%	5	10.0%	4	6.0%	28	41.8%	12	17.9%	6	9.0%	0	0.0%
EKITI	29	22	78.6%	6	21.4%	3	6.0%	11	22.0%	6	12.0%	5	10.0%	4	8.0%
ENUGU	20	12	92.3%	1	7.7%	0	0.0%	9	31.0%	4	13.8%	0	0.0%	2	6.9%
FCT	24	11	55.0%	9	45.0%	3	12.5%	11	45.8%	9	37.5%	1	4.2%	0	0.0%
GOMBE	23	15	78.9%	4	21.1%	1	6.3%	9	56.3%	5	31.3%	1	6.3%	0	0.0%
IMO	13	11	84.6%	2	15.4%	0	0.0%	7	53.8%	2	15.4%	3	23.1%	1	7.7%
JIGAWA	24	22	95.7%	1	4.3%	1	4.2%	17	70.8%	2	8.3%	4	16.7%	0	0.0%
KADUNA	54	32	78.0%	9	22.0%	8	14.8%	18	33.3%	15	27.8%	13	24.1%	0	0.0%
KANO	38	31	91.2%	3	8.8%	7	18.4%	15	39.5%	10	26.3%	6	15.8%	0	0.0%
KATSINA	43	33	84.6%	6	15.4%	1	2.3%	20	46.5%	16	37.2%	6	14.0%	0	0.0%
KEBBI	20	16	80.0%	4	20.0%	6	30.0%	10	50.0%	4	20.0%	0	0.0%	0	0.0%
KOGI	62	48	84.2%	9	15.8%	1	1.6%	30	48.4%	25	40.3%	5	8.1%	1	1.6%
KWARA	40	29	72.5%	11	27.5%	6	15.4%	17	43.6%	10	25.6%	5	12.8%	1	2.6%
LAGOS	94	68	79.1%	18	20.9%	6	6.5%	36	38.7%	32	34.4%	16	17.2%	3	3.2%
NASARAWA	81	61	84.7%	11	15.3%	1	1.3%	35	44.3%	32	40.5%	10	12.7%	1	1.3%
NIGER	18	12	75.0%	4	25.0%	4	22.2%	8	44.4%	4	22.2%	2	11.1%	0	0.0%

OGUN	57	40	81.6%	9	18.4%	3	5.6%	21	38.9%	14	25.9%	15	27.8%	1	1.9%
ONDO	45	39	88.6%	5	11.4%	1	2.3%	18	40.9%	13	29.5%	11	25.0%	1	2.3%
OSUN	49	30	71.4%	12	28.6%	5	10.2%	17	34.7%	16	32.7%	10	20.4%	1	2.0%
ОУО	55	35	67.3%	17	32.7%	3	5.5%	26	47.3%	19	34.5%	5	9.1%	2	3.6%
PLATEAU	34	28	87.5%	4	12.5%	6	17.6%	15	44.1%	10	29.4%	3	8.8%	0	0.0%
RIVERS	45	29	65.9%	15	34.1%	7	15.9%	20	45.5%	13	29.5%	4	9.1%	0	0.0%
SOKOTO	26	4	80.0%	1	20.0%	1	20.0%	4	80.0%	0	0.0%	0	0.0%	0	0.0%
TARABA	33	16	69.6%	7	30.4%	3	9.4%	12	37.5%	12	37.5%	2	6.3%	3	9.4%
YOBE	25	15	78.9%	4	21.1%	4	17.4%	10	43.5%	6	26.1%	3	13.0%	0	0.0%
ZAMFARA	31	28	96.6%	1	3.4%	2	6.9%	16	55.2%	6	20.7%	3	10.3%	2	6.9%
TOTAL	1387	990	79.6%	253	20.4%	124	9.3%	594	44.5%	395	29.6%	193	14.5%	29	2.2%



PERCENTAGE OF THOSE WHO HAVE CALLED 122 BEFORE									
STATE	CALLED 122 (YES)	HAVE NOT CALLED 122 (NO)							
ABIA	0.0%	100.0%							
ADAMAWA	13.0%	87.0%							
AKWA IBOM	20.5%	79.5%							
ANAMBRA	44.0%	56.0%							
BAUCHI	38.5%	61.5%							
BAYELSA	13.0%	87.0%							
BENUE	17.6%	82.4%							
BORNO	37.5%	62.5%							
CROSS RIVER	26.5%	73.5%							
DELTA	10.0%	90.0%							
EBONYI	19.7%	80.3%							
EDO	27.1%	72.9%							
EKITI	25.9%	74.1%							
ENUGU	45.5%	54.5%							
FCT	31.6%	68.4%							
GOMBE	22.7%	77.3%							
IMO	23.1%	76.9%							
JIGAWA	13.6%	86.4%							
KADUNA	24.5%	75.5%							
KANO	34.3%	65.7%							
KATSINA	26.2%	73.8%							
KEBBI	10.0%	90.0%							
KOGI	29.5%	70.5%							
KWARA	31.6%	68.4%							
LAGOS	12.4%	87.6%							
NASARAWA	42.9%	57.1%							
NIGER	11.1%	88.9%							
OGUN	25.9%	74.1%							
ONDO	15.9%	84.1%							
OSUN	30.4%	69.6%							
ОУО	19.2%	80.8%							
PLATEAU	38.2%	61.8%							
RIVERS	26.2%	73.8%							
SOKOTO	7.7%	92.3%							
TARABA	67.7%	32.3%							
YOBE	40.0%	60.0%							
ZAMFARA	50.0%	50.0%							
TOTAL	26.4%	73.6%							

HOW DID YOU GET TO KNOW OF THE 122 (IN PERCENTAGE)										
	THROUGH		AT THE	ON FRSC PATROL	NO	PERCENTAGE				
STATES	FRIENDS	MEDIA	SCENE	VEHICLE	RESPONSE	(%)				
	5.6%	0.0%	0.0%	16.7%	//.8%	100.0%				
	16.0%	24.0%	0.0%	44.0%	16.0%	100.0%				
AKWA IBOM	10.0%	10.0%	2.5%	22.5%	55.0%	100.0%				
	11.5%	23.1%	0.0%	46.2%	19.2%	100.0%				
BAUCHI	12.5%	10.0%	5.0%	62.5%	10.0%	100.0%				
BAYELSA	0.0%	32.0%	4.0%	60.0%	4.0%	100.0%				
BENUE	8.3%	19.4%	2.8%	38.9%	30.6%	100.0%				
BORNO	8.0%	8.0%	28.0%	52.0%	4.0%	100.0%				
CROSS RIVER	8.6%	14.3%	8.6%	37.1%	31.4%	100.0%				
DELTA	15.0%	27.5%	5.0%	35.0%	17.5%	100.0%				
EBONYI	8.7%	21.7%	1.4%	39.1%	29.0%	100.0%				
EDO	6.0%	20.0%	14.0%	50.0%	10.0%	100.0%				
EKITI	0.0%	34.5%	3.4%	34.5%	27.6%	100.0%				
ENUGU	10.0%	0.0%	0.0%	35.0%	55.0%	100.0%				
FCT	8.3%	20.8%	12.5%	25.0%	33.3%	100.0%				
GOMBE	4.3%	17.4%	8.7%	47.8%	21.7%	100.0%				
IMO	0.0%	38.5%	0.0%	15.4%	46.2%	100.0%				
JIGAWA	12.5%	4.2%	4.2%	50.0%	29.2%	100.0%				
KADUNA	16.7%	7.4%	7.4%	46.3%	22.2%	100.0%				
KANO	7.9%	15.8%	2.6%	52.6%	21.1%	100.0%				
KATSINA	2.3%	18.6%	2.3%	62.8%	14.0%	100.0%				
KEBBI	5.0%	0.0%	30.0%	40.0%	25.0%	100.0%				
KOGI	4.8%	24.2%	4.8%	46.8%	19.4%	100.0%				
KWARA	12.5%	22.5%	10.0%	40.0%	15.0%	100.0%				
LAGOS	8.5%	14.9%	4.3%	41.5%	30.9%	100.0%				
NASARAWA	18.5%	19.8%	3.7%	48.1%	9.9%	100.0%				
NIGER	5.6%	33.3%	16.7%	27.8%	16.7%	100.0%				
OGUN	3.5%	19.3%	8.8%	29.8%	38.6%	100.0%				
ONDO	11.1%	17.8%	6.7%	44.4%	20.0%	100.0%				
OSUN	6.1%	32.7%	0.0%	32.7%	28.6%	100.0%				
ОУО	1.8%	5.5%	10.9%	56.4%	25.5%	100.0%				
PLATEAU	17.6%	35.3%	2.9%	35.3%	8.8%	100.0%				
RIVERS	4.4%	31.1%	22.2%	24.4%	17.8%	100.0%				
SOKOTO	3.8%	3.8%	11.5%	15.4%	65.4%	100.0%				
TARABA	18.2%	9.1%	0.0%	66.7%	6.1%	100.0%				
YOBE	24.0%	8.0%	4.0%	56.0%	8.0%	100.0%				
ZAMFARA	9.7%	6.5%	3.2%	45.2%	35.5%	100.0%				
TOTAL	9.1%	17.9%	6.4%	42.4%	24.2%	100.0%				

RESPONSE OF FRSC TEAMS TO THE CRASH SCENES AFTER THE CALLS										
STATE	GOOD (%)	FAIR (%)	POOR (%)							
ABIA	35.7%	50.0%	14.3%							
ADAMAWA	34.8%	56.5%	8.7%							
AKWA IBOM	42.1%	47.4%	10.5%							
ANAMBRA	75.0%	20.8%	4.2%							
BAUCHI	61.5%	35.9%	2.6%							
BAYELSA	16.7%	62.5%	20.8%							
BENUE	51.4%	40.0%	8.6%							
BORNO	100.0%	0.0%	0.0%							
CROSS RIVER	39.4%	51.5%	9.1%							
DELTA	63.2%	31.6%	5.3%							
EBONYI	50.0%	42.4%	7.6%							
EDO	50.0%	43.8%	6.3%							
EKITI	89.3%	10.7%	0.0%							
ENUGU	84.6%	7.7%	7.7%							
FCT	64.7%	29.4%	5.9%							
GOMBE	57.9%	36.8%	5.3%							
IMO	69.2%	23.1%	7.7%							
JIGAWA	63.6%	36.4%	0.0%							
KADUNA	50.0%	50.0%	0.0%							
KANO	71.4%	25.7%	2.9%							
KATSINA	48.8%	51.2%	0.0%							
KEBBI	42.1%	47.4%	10.5%							
KOGI	78.7%	21.3%	0.0%							
KWARA	78.8%	21.2%	0.0%							
LAGOS	57.3%	37.1%	5.6%							
NASARAWA	64.1%	35.9%	0.0%							
NIGER	50.0%	44.4%	5.6%							
OGUN	48.0%	52.0%	0.0%							
ONDO	84.1%	15.9%	0.0%							
OSUN	64.6%	35.4%	0.0%							
ОУО	63.0%	35.2%	1.9%							
PLATEAU	43.8%	43.8%	12.5%							
RIVERS	57.1%	40.5%	2.4%							
SOKOTO	43.5%	52.2%	4.3%							
TARABA	81.8%	15.2%	3.0%							
УОВЕ	64.0%	28.0%	8.0%							
ZAMFARA	77.8%	22.2%	0.0%							
TOTAL	60.0%	35.9%	4.1%							







HOW DO YOU RATE THE RESPONSES OF OPERATORS?											
STATES	FRIENDLY (%)	HOSTILE (%)	NON CHALANT (%)	TOTAL (%)							
ABIA	100.0%	0.0%	0.0%	100%							
ADAMAWA	100.0%	0.0%	0.0%	100%							
AKWA IBOM	100.0%	0.0%	0.0%	100%							
ANAMBRA	88.9%	0.0%	11.1%	100%							
BAUCHI	78.6%	0.0%	21.4%	100%							
BAYELSA	100.0%	0.0%	0.0%	100%							
BENUE	80.0%	0.0%	20.0%	100%							
BORNO	100.0%	0.0%	0.0%	100%							
CROSS RIVER	88.9%	0.0%	11.1%	100%							
DELTA	50.0%	25.0%	25.0%	100%							
EBONYI	71.4%	7.1%	21.4%	100%							
EDO	100.0%	0.0%	0.0%	100%							
EKITI	80.0%	0.0%	20.0%	100%							
ENUGU	85.7%	14.3%	0.0%	100%							
FCT	100.0%	0.0%	0.0%	100%							
GOMBE	100.0%	0.0%	0.0%	100%							
IMO	100.0%	0.0%	0.0%	100%							
JIGAWA	66.7%	33.3%	0.0%	100%							
KADUNA	63.6%	18.2%	18.2%	100%							
KANO	100.0%	0.0%	0.0%	100%							
KATSINA	66.7%	16.7%	16.7%	100%							
KEBBI	100.0%	0.0%	0.0%	100%							
KOGI	94.4%	5.6%	0.0%	100%							
KWARA	100.0%	0.0%	0.0%	100%							
LAGOS	91.7%	0.0%	8.3%	100%							
NASARAWA	78.8%	3.0%	18.2%	100%							
NIGER	100.0%	0.0%	0.0%	100%							
OGUN	93.3%	6.7%	0.0%	100%							
ONDO	71.4%	14.3%	14.3%	100%							
OSUN	93.3%	0.0%	6.7%	100%							
ОУО	88.9%	0.0%	11.1%	100%							
PLATEAU	100.0%	0.0%	0.0%	100%							
RIVERS	100.0%	0.0%	0.0%	100%							
SOKOTO	85.7%	14.3%	0.0%	100%							
TARABA	90.9%	4.5%	4.5%	100%							
YOBE	70.0%	30.0%	0.0%	100%							
ZAMFARA	78.9%	10.5%	10.5%	100%							
TOTAL	87.0%	5.2%	7.7%	100%							

DO YOU KNOW THAT 122 CAN ALSO BE USED TO REPORT OTHER EMERGENCIES?							
STATES	YES (%)	NO (%)	NO RESPONSE (%)	TOTAL (%)			
ABIA	5.6%	72.2%	22.2%	100%			
ADAMAWA	48.0%	48.0%	4.0%	100%			
AKWA IBOM	37.5%	55.0%	7.5%	100%			
ANAMBRA	26.9%	69.2%	3.8%	100%			
BAUCHI	35.0%	62.5%	2.5%	100%			
BAYELSA	28.0%	72.0%	0.0%	100%			
BENUE	38.9%	55.6%	5.6%	100%			
BORNO	56.0%	44.0%	0.0%	100%			
CROSS RIVER	28.6%	65.7%	5.7%	100%			
DELTA	37.5%	62.5%	0.0%	100%			
EBONYI	42.0%	53.6%	4.3%	100%			
EDO	50.0%	48.0%	2.0%	100%			
EKITI	82.8%	10.3%	6.9%	100%			
ENUGU	25.0%	40.0%	35.0%	100%			
FCT	37.5%	41.7%	20.8%	100%			
GOMBE	43.5%	39.1%	17.4%	100%			
IMO	30.8%	69.2%	0.0%	100%			
JIGAWA	45.8%	45.8%	8.3%	100%			
KADUNA	37.0%	57.4%	5.6%	100%			
KANO	39.5%	55.3%	5.3%	100%			
KATSINA	20.9%	79.1%	0.0%	100%			
KEBBI	25.0%	75.0%	0.0%	100%			
KOGI	45.2%	54.8%	0.0%	100%			
KWARA	47.5%	45.0%	7.5%	100%			
LAGOS	30.9%	67.0%	2.1%	100%			
NASARAWA	49.4%	45.7%	4.9%	100%			
NIGER	38.9%	61.1%	0.0%	100%			
OGUN	54.4%	40.4%	5.3%	100%			
ONDO	37.8%	51.1%	11.1%	100%			
OSUN	42.9%	57.1%	0.0%	100%			
ОУО	34.5%	63.6%	1.8%	100%			
PLATEAU	29.4%	70.6%	0.0%	100%			
RIVERS	26.7%	71.1%	2.2%	100%			
SOKOTO	26.9%	69.2%	3.8%	100%			
TARABA	84.8%	15.2%	0.0%	100%			
YOBE	60.0%	36.0%	4.0%	100%			
ZAMFARA	35.5%	48.4%	16.1%	100%			
TOTAL	40.3%	54.8%	4.9%	100%			

н	HAVE YOU TALKED TO ANYONE ABOUT THE FRSC 122 BEFORE?							
STATES	YES (%)	NO (%)	INDIFFERENT (%)	NO RESPONSE	TOTAL (%)			
ABIA	5.6%	72.2%	11.1%	11.1%	100%			
ADAMAWA	60.0%	32.0%	4.0%	4.0%	100%			
AKWA IBOM	32.5%	50.0%	5.0%	12.5%	100%			
ANAMBRA	50.0%	42.3%	3.8%	3.8%	100%			
BAUCHI	55.0%	37.5%	2.5%	5.0%	100%			
BAYELSA	36.0%	56.0%	4.0%	4.0%	100%			
BENUE	66.7%	33.3%	0.0%	0.0%	100%			
BORNO	72.0%	28.0%	0.0%	0.0%	100%			
CROSS RIVER	37.1%	57.1%	2.9%	2.9%	100%			
DELTA	55.0%	37.5%	7.5%	0.0%	100%			
EBONYI	40.6%	53.6%	2.9%	2.9%	100%			
EDO	64.0%	22.0%	10.0%	4.0%	100%			
EKITI	31.0%	51.7%	0.0%	17.2%	100%			
ENUGU	25.0%	40.0%	0.0%	35.0%	100%			
FCT	45.8%	37.5%	0.0%	16.7%	100%			
GOMBE	39.1%	26.1%	4.3%	30.4%	100%			
IMO	38.5%	61.5%	0.0%	0.0%	100%			
JIGAWA	54.2%	33.3%	4.2%	8.3%	100%			
KADUNA	57.4%	33.3%	7.4%	1.9%	100%			
KANO	57.9%	34.2%	0.0%	7.9%	100%			
KATSINA	62.8%	23.3%	7.0%	7.0%	100%			
KEBBI	50.0%	45.0%	5.0%	0.0%	100%			
KOGI	51.6%	38.7%	6.5%	3.2%	100%			
KWARA	67.5%	17.5%	2.5%	12.5%	100%			
LAGOS	36.2%	56.4%	4.3%	3.2%	100%			
NASARAWA	71.6%	24.7%	2.5%	1.2%	100%			
NIGER	61.1%	38.9%	0.0%	0.0%	100%			
OGUN	40.4%	49.1%	7.0%	3.5%	100%			
ONDO	48.9%	28.9%	17.8%	4.4%	100%			
OSUN	51.0%	44.9%	2.0%	2.0%	100%			
ОУО	43.6%	54.5%	1.8%	0.0%	100%			
PLATEAU	70.6%	20.6%	5.9%	2.9%	100%			
RIVERS	37.8%	33.3%	26.7%	2.2%	100%			
SOKOTO	42.3%	50.0%	0.0%	7.7%	100%			
TARABA	78.8%	18.2%	0.0%	3.0%	100%			
YOBE	80.0%	16.0%	4.0%	0.0%	100%			
ZAMFARA	45.2%	45.2%	9.7%	0.0%	100%			
TOTAL	51.0%	39.0%	5.1%	5.0%	100%			







HAVE YOU BEEN INVOLVED IN ANY CRASH AND IF YES WAS THERE AN FRSC RESCUE TEAM							
		1	NVOLVEMENT IN CRASH	1	FRSC RE	SCUE TEA	M PRESENCE
STATES	YES	NO	NO RESPONSE	TOTAL	YES	NO	TOTAL
ABIA	4	14	0	18	75.0%	25.0%	100%
ADAMAWA	9	15	1	25	33.3%	66.7%	100%
AKWA IBOM	16	22	2	40	61.1%	38.9%	100%
ANAMBRA	11	15	0	26	70.0%	30.0%	100%
BAUCHI	17	20	3	40	64.7%	35.3%	100%
BAYELSA	4	20	1	25	75.0%	25.0%	100%
BENUE	15	19	2	36	68.8%	31.3%	100%
BORNO	5	20	0	25	50.0%	50.0%	100%
CROSS RIVER	15	18	2	35	73.3%	26.7%	100%
DELTA	14	26	0	40	64.3%	35.7%	100%
EBONYI	28	35	6	69	60.6%	39.4%	100%
EDO	20	28	2	50	71.4%	28.6%	100%
EKITI	8	21	0	29	50.0%	50.0%	100%
ENUGU	4	6	10	20	55.6%	44.4%	100%
FCT	8	16	0	24	85.7%	14.3%	100%
GOMBE	7	13	3	23	71.4%	28.6%	100%
IMO	5	6	2	13	66.7%	33.3%	100%
JIGAWA	13	11	0	24	91.7%	8.3%	100%
KADUNA	26	26	2	54	66.7%	33.3%	100%
KANO	14	21	3	38	86.7%	13.3%	100%
KATSINA	16	25	2	43	66.7%	33.3%	100%
KEBBI	7	13	0	20	57.1%	42.9%	100%
KOGI	24	36	2	62	76.9%	23.1%	100%
KWARA	13	25	2	40	69.2%	30.8%	100%
LAGOS	24	66	4	94	61.5%	38.5%	100%
NASARAWA	27	51	3	81	80.8%	19.2%	100%
NIGER	6	12	0	18	80.0%	20.0%	100%
OGUN	26	31	0	57	70.8%	29.2%	100%
ONDO	14	30	1	45	86.7%	13.3%	100%
OSUN	18	30	1	49	61.1%	38.9%	100%
ОУО	16	37	2	55	52.9%	47.1%	100%
PLATEAU	16	16	2	34	75.0%	25.0%	100%
RIVERS	16	27	2	45	70.6%	29.4%	100%
SOKOTO	7	16	3	26	66.7%	33.3%	100%
TARABA	19	14	0	33	77.8%	22.2%	100%
YOBE	12	12	1	25	84.6%	15.4%	100%
ZAMFARA	11	18	2	31	72.7%	27.3%	100%
TOTAL	515	831	66	1412	69.0%	31.0%	100%





AWARENESS OF 122 AND 2013 CRASH RECORDS						
STATE RANKING OF AWARENESS	LEVEL OF AWARENESS (%)					
EDO	92.0%					
KEBBI	90.0%					
SOKOTO	88.5%					
KWARA	87.5%					
PLATEAU	85.3%					
BAUCHI	85.0%					
TARABA	84.8%					
RIVERS	82.2%					
NASARAWA	81.5%					
KOGI	80.6%					
ADAMAWA	80.0%					
YOBE	80.0%					
KATSINA	79.1%					
DELTA	75.0%					
KADUNA	74.1%					
KANO	73.7%					
ONDO	73.3%					
ANAMBRA	73.1%					
NIGER	72.2%					
ОУО	70.9%					
FCT	70.8%					
GOMBE	69.6%					
OSUN	67.3%					
JIGAWA	66.7%					
EBONYI	65.2%					
BENUE	63.9%					
ZAMFARA	61.3%					
ENUGU	60.0%					
CROSS RIVER	60.0%					
LAGOS	58.5%					
OGUN	56.1%					
BAYELSA	52.0%					
EKITI	48.3%					
IMO	46.2%					
AKWA IBOM	42.5%					
BORNO	40.0%					
ABIA	33.3%					

#### CALL RECORDS

	CRASHES	TRAFFIC CONGESTION	ENQUIRIES	COMPLAINTS	SUGGESTIONS	APPRECIATION	FEEDBACK	INFORMATION	OTHER INCIDENTS	TOTAL FRSC CALLS	NON- FRSC CALLS	TOTAL
2012 (FROM INCEPTION IN WEEK 27)	341	89	129	3	0	1	3	156	24	722	189770	190492
2013	1623	218	694	10	4	10	2	242	175	2803	240294	243097
2014 AS AT WEEK 6	220	10	17	0	0	2	0	12	22	261	22383	22644
TOTAL	2184	317	840	13	4	13	5	410	221	3786	452447	456233





# F. FINDINGS

- i. From the inception of 122 in week 27 of 2012, till week 6 of 2014, the following were found:
  - ➢ Total calls..... 456,454
  - > FRSC calls.....4,007
  - > Non FRSC calls......452,447
  - > Total calls on emergency:
  - > Crashes......2,154
  - Traffic congestion.....317
  - > Enquiries.....840
  - Suggestions...4
  - > Appreciation....13
  - > Feedback...5
  - > Total complaints.....13
- ii. Bulk of calls was non FRSC calls; out of the total calls of 456,454 received from inception which was week 27 of 2012 to week 06 of 2014 only 4,007 calls (1%) were emergency related calls. The bulk of the calls to the centre 452,447 (99%) were non FRSC calls. This was as a result of the number 122 being used previously for the network provider (Airtel) customer service and the lines had been automatically programmed on the subscribers' lines.
- iii. A total of 1434 respondents were captured out of which 79.6% were males & 20.4% females. 44.5% of the respondents were in the 26-35 age brackets and the less from above 56 brackets.
- iv. The most aware group of the number 122 was 26-35 age bracket as the less is 56-60 bracket.
- v. More males of the respondents were aware of 122. The least awareness was in the female categories.
- vi. On States basis, Edo State had the highest awareness rate of 92.0% while Abia State had the least 33.3%.
- vii. 10 States had 80% and above in terms of awareness ratings. They are:
  - ≻ Edo
  - > Kebbi
  - Sokoto

- ≻ Kwara
- > Plateau
- > Bauchi
- > Taraba
- > Rivers
- Nasarawa and
- ≻ Kogi.
- viii. The following States had least awareness rating:
  - > Abia
  - > Borno
  - > Akwa-Ibom
  - Imo and
  - > Ekiti
  - ix. On how the respondents got to know of the 122, 9.1% heard of the emergency line through friends, 17.9% through media, 6.4% as the share while majority which is 42.4% got to know through the number on the FRSC Patrol vehicles.
  - x. On the rating of the response of the rescue team after receiving the calls from the members of the Public, 60.0% rated the FRSC team as Good, 35.9% as Fair, 4.1% as Poor.
- xi. The responses of the operators were also captured. 87.0% rated the operators as friendly, 5.2% hostile, while 7.7% rated them as non-challant/unserious.
- xii. 40.3% of respondents were aware that the number 122 could be used for reporting other emergencies while 54.8% were not.
- xiii. 51% of the respondents had assisted in propagating 122 by talking to others on it.

## G. RECOMMENDATIONS

- i. More Public awareness requires on 122, especially in States like Abia and Borno States with low awareness level. Media should be engaged in the awareness campaigns.
- ii. Posters on 122 should also be displayed in all FRSC formations.

- iii. Since, many of the respondents got to know of 122 through the inscriptions on the Patrol vehicles, it means it is efficient. Let all FRSC Patrol vehicles have 122 inscribed on them.
- iv. Suggestions of responses on using the churches, mosques and social media to enlighten the Public should be considered.
- v. The Corps should also organise training Program on conduct, Public relations, Public speaking and courtesy for the operators of the call centre.
- vi. The call centre should have provisions for transferring calls to relevant offices when enquires are being made. For examples, CPEO, CMRO, CTSO and other relevant offices should be able to speak directly to enquirers as the operators presently, are not competent to answer all questions.
- vii. More operators should be engaged as a lot of callers when there are emergencies, may not have the patience to wait for a long time when the lines are busy.
- viii. There must be feedback system as sanctions should be applied to rescue teams or commands that failed to respond to emergency calls when informed. Patrol teams or commands should report back to 122 after any rescue operations.
  - ix. The call centre should also endeavour to report back to the caller after any rescue activity. This will build confidence in the system.
  - x. The Corps should also engage the network operators to improve on the connectivity as many respondents also complained of not getting through to the call centre in time.
- xi. Efforts to reduce non FRSC calls which form 99% of the total calls, by continuous engagement of the Airtel network provider to sort out the usage of non FRSC calls as these actually affect connectivity. Many callers who would have reported crashes and other Emergencies find it difficult to get through.
- xii. The awareness could be further enhanced with the use of bulk messaging. The Network operators should be of assistance on this. This should be part of their Corporate Social responsibility.

# H. CONCLUSION

The FRSC Emergency Toll Free Number, 122 has impacted positively in the FRSC task of ensuring prompt response to crash scenes and getting help to victims of road traffic crashes in Nigeria. It is gaining wide popularity as the Corps is expected to step up its awareness activities to let all road users get familiar with the number.

Let's continue to push until everybody knows about the number.

# ROAD TRAFFIC CRASHES (RTC) FORECASTING USING MULTIVARIATE <u>ANALYSIS</u>

## INTRODUCTION

Road Traffic Crashes (RTC) forecasting is of importance to the Corps in order to reduce the menace on our roads and the effect on Nigeria populace. Hence, we considered some vital variables (not exhaustive); human population, vehicle population, road length and offences committed by road users in order to model RTC.

The Analysis was carried out on annual basis. The Data used cover the period of 2006 - 2013. The trend analysis and projection for all the independent variables show that they are all increasing with time. Therefore, if the trend continues, we are going to witness 11937 RTC cases in year 2014 indicating a decrease of 6.2%. This will increase to 13279 cases (i.e. 11.2% increment over year 2014) in year 2015 and then the RTC cases will drop to 12202 cases in year 2016 indicating a decrease of 8.1%. This will further reduce to 10705 cases (12.3% reduction) in 2017 and then 8781 cases representing 18.0% reduction in year 2018 if pro-active measures are put in place.

## METHODOLOGY

Data were collected on Road Traffic Crashes (RTC), human population, vehicle population, road length and offences committed by road users from 2006 to 2013.

Multivariate analysis was carried out with the use of multiple regressions. Also, table and charts were used to show clearly the trends followed by the independent variables.

## ANALYSIS/OBSERVATIONS

## ROAD TRAFFIC CRASH (RTC) FORECASTING USING OTHER VARIABLES

YEAR	HUMAN POPULATION	OFFENCES	ROAD LENGTH	VEHICLE POPULATION	RTC	FORECASTED RTC
2006	143314909	418713	229494	1340856	9114	9845-
2007	147187353	539294	233394	1367453	8477	7960-
2008	151208080	419739	237294	1394050	11341	10617-
2009	155381020	435659	241194	1420647	10854	10168-
2010	159707780	599870	245094	1447244	5330	6346-
2011	164192925	611181	249000	1454080*	4765	3799-
2012	168833776	579929	256367*	1476144*	6269	9566-
2013	173370827	630275*	262010*	1497931*	12722	10572-
2014	177933827*	659116*	267654*	1519443*		11937 <sup>+</sup>
2015	182496827*	687957*	273297*	1540677*		13279⁺
2016	188099480*	716798*	278941*	1561635*		12202⁺
2017	193874134*	745639*	284584*	1582317*		10705⁺
2018	199826070*	774480*	290228*	1602722*		8781⁺

\* Projected values. +Forward forecast. -Backward forecast (forecasting for years that already have real value)

MODELLING

The following model was used in forecasting the RTC values:

 $y = -193419.175 - 0.002x_1 - 0.02x_2 + 1.926x_3 + 0.075x_4$ 

Where: y is RTC,  $x_1$  is human population,  $x_2$  is offences,  $x_3$  is road length and  $x_4$  is vehicle population.

 $R^2$  = 0.683, this shows that the model is a good fit and that the RTC is being explained by the independent variables with at least 68.3%.

Presented below are tables and charts showing the detailed analysis.

Model		Unstand Coeffi	ardized cients	Standardized Coefficients	†	Sig.		
		В	Std. Error	Beta				
	(Constant)	-193419.175	155722.045		-1.242	.302		
	Population	002	.002	-8.277	-1.307	.282		
1	Offences	020	.018	626	-1.135	.339		
	Road Length	1.926	1.119	7.329	1.721	.184		
	Vehicle Population	.075	.149	1.383	.505	.649		

## **Coefficients**<sup>a</sup>

a. Dependent Variable: Road Traffic Crashes

#### **Descriptive Statistics**

	Mean	Std. Deviation	Ν
Road Traffic Crashes	8609.00	2944.652	8
Population	157899583.75	10558514.889	8
Offences	529332.50	90668.529	8
Road Length	244230.88	11204.773	8
Vehicle Population	1424800.63	54305.333	8

## Model Summary

Model	R	R Square	Adjusted R	Std. Error of	
			Square	the Estimate	
1	.826ª	.683	.260	2533.567	

a. Predictors: (Constant), Vehicle Population, Offences, Road Length, Population

b. Dependent Variable: Road Traffic Crashes

ANOVAª

Model		Sum of	df	Mean Square	F	Sig.
		Squares				
	Regression	41439958.103	4	10359989.526	1.614	.362 <sup>b</sup>
1	Residual	19256885.897	3	6418961.966		u .
1	Total	60696844.00	7			
	Tora	0	,			

a. Dependent Variable: Road Traffic Crashes

b. Predictors: (Constant), Vehicle Population, Offences, Road Length, Population







# SAFE DRIVING TECHNIQUES IN INTER /INTRA-URBAN TRAFFIC ENVIRONMENT/ SAFETY EQUIPMENT IN MODERN AUTOMOBILE

#### BY CRC TAYO ADEBAYO

Driving within the urban and inter city traffic environment required a great deal of expertise. This is because the problem associated with this type of driving. In this regards the cocoon of the traffic must be considered as a great necessity in this driving environment. This will help the drivers in determining the safe space and wrap up environment for the driver, the vehicle and pedestrians alike. Therefore, the cocoon of safety can be simply defined as covering or wraps all around a person or thing to form a protection in a motor traffic environment. The protection enjoy by surrounding could be the distance enjoyed in between vehicles to give protection to one vehicle and the other. It can also be complete protection enjoyed against any harm, most especially as it concerns safety of life and property in an enclosed environment.

On the other hand, safety is defined as the state of being safe and protected from danger or harm. Another definition so to say is a place where you are safe, either in a house, cock pit or in a vehicle etc. Modern driving techniques in recent times placed more emphasis on the safety of lives in automobile.

The challenges posed by accident prevention of Safety of lives and property in modern age have been a serious concern to all and sundry. The problems of safety have been a big issue due to ever increasing traffic challenges in modern traffic all over the World. Manufacturers of modern cars placed more emphasis on safety than aesthetics in automobiles production. This has also put more challenges on drivers and safety on our roads. However, modern vehicles came with sophisticated devices to make them safe and comfortable; devices such as
seatbelt, air bag, spring iron impact reinforcements are some of the few invention of modern technology.

Seatbelt is a protective device installed in modern automobile for the protection of lives and properties. This device is necessary in vehicle to prevent direct impact of occupants on car furniture in case of event of road traffic crash. Many occupants of vehicle die as a result of direct collision with steering and other furniture in the car. This has caused many preventable deaths in automobiles. A seat belt is therefore, a soft strap that fastens a driver to a moving vehicle and prevents him from being thrown out or against the interior of the vehicle during sudden stops or crash. Poor knowledge of the use of seatbelt has sent many drivers to early graves. Impacts that could have been prevented and safe lives, has caused many drivers into early graves. However, the first patent restraining belt designed to protect passengers in road vehicles was granted to E.J Claghorn in 1885 after successfully tested in the aircraft for efficacy, before introduction into modern automobiles in 1950.

Though, the seat belt issue has been controversial most especially in developing counties due to many factors. However, some schools of thought see it as necessary due to rise in the number of people died as a result of head impact to victims of road traffic crashes. Nigeria adopted the policy of compulsory use of seatbelt by front occupant in 2003, due to record of high traffic crashes. There are divergent opinions on the issue of seat belt. Some believe it is one of the breakthroughs in modern safety in accident prevention innovations. While others are of the opinion that the seat beat is an unnecessary burden to drivers and inconveniences the passengers. In the developed world the issue of seat belt is a serious offence to both the occupants and driver.

## AIR BAG/SUPPLIMENTAL RESTRAINT SYSTEM (SRS)

It a passive- restraint device that protect the driver and the passengers without any action on their part or it can also be described as an inflatable pillow like cushion stored in the instrument panel and triggered to inflate in a fraction of a second by the force of impact. The function is absorbing impact and cushioning effect of damage in case of event in a car. Therefore air bag can be described as a safety device in automobiles to prevent direct impact against car interior in case of crash. However, this is not alternative to the seatbelt as the seatbelt remain the single primary restraint system in the car. Though, there are some issues raised on the use of airbags in 1990, but it remains a supplementary requirement to seatbelt in automobiles.

Therefore airbag is a device to prevent passengers and drivers from striking the dashboard, window or windshield of a car in a collision. Air bags are made of nylon and are built into the steering column, dash board, and in some cars the rear passengers door or side panel. They inflate to cushion the driver or passenger within 40 milliseconds 0.04 second after a high impact front end. The inflation is initiated by sodium oxide and nitrogen rapidly fills the air bag. The bag absorbs the force of the human hitting it and it immediately deflates. The speed with which the airbag deploys is about 200 miles (320kilometers) per hour.

## Functions of an air bag

- Preventions of victims from striking his chest on car furniture in case of accident.
- Protect the occupants from severe injury.
- Help drivers and the passengers from not being thrown out of the vehicle in case of impact.

- Prevent serious injury that would have resulted from hitting of chest against steering of vehicle.
- Air bag complements the function of seat belt.

In as much as it prevents severe injuries in accident situations, it is worthy to note that children below the age of 12 years or dwarfs could be suffocated as a result of their height when the air bag shoot out from the dash board. Invariably, such persons are better kept at the backseat of the vehicle to prevent serious injury or death in event.

#### Side Impact Protection System (SIPS)

This device is still new and more recently installed in few vehicles from Europe and America. The device is designed to protect the side impact in automobile crash. It also protects the occupants of a vehicle from damage that may come from the side of vehicle as a result of accident.

#### ROAD TRAFFIC CHALLENGES

The ever increasing density of vehicular traffic on our highways has created the problem of accident, traffic jams, undue increase in travel time and other unforeseen circumstances etc. The road environment is bedeviled by other factors such as lawlessness among motorists, lack of adequate knowledge of the traffic regulations, mechanically deficient vehicles, absent of road furniture, defective road constructions, bad road, inadequate traffic laws and enforcements.

Therefore, it becomes necessary for drivers to learn special techniques and safety on our roads in order to gain new knowledge on both inter and intra urban traffic environment to make them guide against common mistakes that usually cause accidents on our roads. To Weather the storm of road traffic hazards, special skills are required to handle both inter and intra urban traffic situations.

## TYPES OF URBAN TRAFFIC

- Inter urban traffic
- Intra urban traffic

#### INTER URBAN TRAFFFIC

Inter urban traffic is vehicular movements from one city to the other. This could also be described as traveling between cities, states or regions. It is characterized with high speed of vehicles and not too many stops on the highway. This type of driving involves highroad where drivers travel on high speed. Not all driver are proficient in driving on such road e.g. intercity rail service, inter-state transport services etc.

### INTRA URBAN TRAFFIC

While the intra urban traffic situation is traffic within the cities, it is mostly referred to as the movement of vehicles within the city. The challenges faced by drivers in intra urban traffic situations, are different from those of inter – urban in many ways. In order for drivers to develop special techniques to handle these situations, it is important to know the characteristics of inter and intra urban traffic and what makes each of them unique.

Characteristics of Inter -Urban Traffic

• In inter-urban traffic environment, the Cocoon of Safety is relatively large as each motorist has more space to themselves. Vehicles travel at different speed and to different direction on the highway

- Inter-urban traffic environment afford you the opportunity to drive at your own pace. As interruption is avoided not too many vehicles are involved in the movement on inter urban traffic situations, except during the festive periods which is characterized with high vehicular movement.
- The problem of over speeding, dangerous overtaking, broken down vehicles/or accidental vehicles are more pronounced in inter city traffic due to various factors as it relates to highway traffic environment.
- On the average, the drivers on inter-city route are more competent than those on intra city routes as most drivers are professionals and driving environment is more hostile due to behavioral patterns of most drivers. Unlike intra urban city driving where learner drivers, quarks, new entrants are found.
- The average speed of motorist in inter urban traffic is higher than in intra -urban traffic as most drivers on such routes have a target of their destinations and time of arrival.
- They are mostly vehicles that are road worthy that can withstand the stress of the road and other adverse conditions.
- Highway robbery, Police check points, construction site and other road workers constitute more dangerous trend on the route. While on the other hand, intra urban traffic situation have fewer challenges of law enforcement agents.
- Herdsmen crossing, grazing animals are some of the dangers common on inter urban highways all these could cause accidents.

## Characteristics of Intra -City Urban Traffic

In intra city urban traffic, the following characteristics are noticeable requirements for safe driving. They are

- i. The Cocoon of safety is grossly reduced as a result of bumper to bumper driving, vehicles drive too closely due to road network and the built up environment in which they operate.
- ii. The ubiquitous/ (common movement everywhere) by commercial motorcyclists and taxi cab operators attitude constitute the larger percentage of dangers to motorized road users. These set of road users are known to be very careless and pay no or little attention to safety, because they are more concerned with the amount they make in a day or the passengers they intend to pick for monetary returns.
- iii. There is constant maneuvering through junctions and roundabout at a more frequent interval than what you find in the inter-urban traffic, as an average operator drives in and out of traffic in such a voracious manner in intra urban environment.
- iv. Intra urban traffic driving involves slow movement of all type of vehicles pedestrians and other environmental factors.
- v. Intra-city traffic requires a high level of road discipline and competence as there are many motorists, motorcyclists and pedestrians to contend with in the cause of driving in the traffic.
- vi. Many incompetent drivers are found in the intra-urban traffic. Learner driver, herdsmen and others are more prevalent in intra urban traffic environments.
- vii. Mechanically deficient and rickety vehicles are found often in the intra urban traffic. Vehicles without windscreens, bad tires and other various mechanical defects are common features on this route.
- viii. Traffic light, pedestrian crossing, roundabout and bus stops are common features of intra-urban traffic, which compels drivers to pay more attention to the road and other unforeseen environmental situations.

- ix. Encroachment into the road by the traders, wrongly parked vehicles, illegal motor parks, newspaper vendors, beggars tax collectors, fuel queues, religious processions/gathering, funeral processions/political parties convoy are common hazards of the intra-urban traffic environment.
- x. Siren blaring convoy of the Government officials, bulling bank bullion vans constitute another important risk on intra traffic environments in Nigeria and world over. These convoys disobey traffic light, bully other motorists and expose both themselves and other road users to unnecessary dangers.

# WHAT ARE THE SPECIAL TECHNIQUES REQUIRED FOR INTER CITY TRAFFIC DRIVING

The inter city traffic movement is identified as movement of vehicle on highway or expressway driving where high speed is expected. Therefore, a high level of lane discipline is required. On the expressway a driver is expected to remain on the slow lane that is, to maintain one lane and be lane disciplined. He must remain on the lane until it becomes absolutely necessary for him to change to fast lane. The fast lane is only used when he wants to overtake, turn left or when his entering the expressway from adjoining road on the left. He should always go back to the slow lane immediately the overtaking finishes.

On the highway, it is important to know that the space available on the expressway which enables you to overtake easily is not there and vehicles coming opposite directions use your lane for overtaking too. The implication is that you cannot overtake when you cannot see the road ahead of you clearly.

You must avoid to overtake in the under mentioned spots and circumstances. They are

- crest of the hill
- at the bend
- difficult terrain to see oncoming vehicles
- roads within villages
- Common sense location and location that is not too good for over taking as drivers should use common sense in areas like this.
- You should only over take when you sure it is safe to do so.
- In the event of driving a vehicle with weak engines, overtaking should be totally avoided.
- Also during raining season where the vision is impaired, overtaking should not be at all cost.
- In situation that accurate speed of on-coming vehicle could not be adjudged overtaking should be avoided.
- In situation that your state of mind is not sound to be on the wheel, it is advised to avoid overtaking on such mind set.
- Where there is white unbroken line.

In inter urban routes there is always space for vehicles to move and many motorists often seize this opportunity to over speed. But the maximum speed for the expressway is 100 km/hr; while on the highway are 90km /hrs. When you are on the highway, the procedure is look- signal-move. This procedure must be followed diligently. Look at your mirror and be sure you are not being overtaken by another vehicle and be sure the road ahead of you is clear, then signal to show your intention overtake and pull back to position. To avoid rear-end collision while overtaking, you must be conscious of the blind spot which your mirror cannot see. To avoid colliding with a vehicle in the blind spot, you should watch your right side mirror after overtaking. When you see the vehicle you have just overtaken in the mirror, it means it is safe for you to go back to your lane.

Always watch out for broken down, accidental abandoned vehicles on the highway and express roads. It is very common for long vehicles, articulated vehicles and other heavy duty equipment to stop and put grasses or tree branches on the road when their vehicles break down. This is not the proper thing to do but it is a very common sign(s) in this part of the world that you must understand and comply with to avoid being a victim.

Pot hole and road failures which create uneven road or undulated surface are very common factors on inter-city roads and expressways. A lot of accidents have been recorded due to inability of drivers to successfully maneuver themselves out of such problems. Some motorists leave their lane while dodging potholes, thereby causing avoidable accident. Moment you notice road failures and potholes infested portions, please speed should be reduced and ensure absolute concentration.

Special technique is required for night journey and hazardous and hazy weather condition especially on the highway and expressway. While driving at night on the highway, the principle of see and be seen must be adhered to. The headlamps must be bright and well set with the high and low beams. The high beam can be used when there is no vehicle in sight or coming from the opposite direction. Always dip your light for vehicle coming from opposite direction. Avoid retaliation if the other motorist fails to dip his light for you. When this happens you have to slow down and keep to your right side of the road.

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Great driving techniques are required in driving in raining conditions. The wipers and blade must be good to adequately remove rain water from the screen with limited or high speed. The fog on the screen must be cleaned and a good knowledge of the operation of fan and heater installed in vehicle for such condition must be possessed to help in driving in special condition. During this period tail/hazard lights and other lighting effects that could be of help must be employed if there is need.

Various automobile devices are forbidden in good traffic environment, the use of air horn to intimidate other vehicles on the road must be avoided. Also the attachment of addition headlamps is discouraged, as on-coming vehicle with poor lightings, and visibility impaired caused by heavy beam from your vehicle may be a great danger to you and the traffic environment if not properly managed. Drugs, sedative and caffeine etc should be avoided as this could be a great danger to the driver and the traffic environments in general. Drivers by good driving standard are advised to drive for a maximum period of 4 hours after which they are required to rest before resumption for driving: this is to avoid fatigue and allow adequate rest.

#### Intra -urban driving Techniques

This is driving within the built up areas and is supposed to be slow when compare to what is obtained in inter urban traffic environment. High density of human and vehicular traffic is more often in intra urban driving. A driver must be extra cautious of his cocoon of safety because this is grossly reduced when compare with inter urban traffic. Drivers should prepare to stop at a very short notice. You must always be on the lookout for pedestrian's crossings, road markings and other features in intra urban traffic situation. The principle of defensive driving must be employed in this type of driving environment. Strict adherent to the principle of defensive driving must be the order of the day; careless motorcyclists and commercial vehicles operators must be watched at all time of the driving. Pulling out and re entering of the road must be done with utmost care. The formula of see and be seen should always be remembered when on this route.

The frequency of junctions and round about is more in intra urban traffic than inter urban traffic environment. In built up areas children playing and crossing into the road are more often in intra urban driving. Driver should always prepare to stop at junctions and roundabout and make sure you give adequate consideration to other road users. Nomadic movements, animals gracing on the roads, pets sudden crossing and unguided children across the neighborhood make driving on the intra urban traffic more difficult than inter urban driving traffic environment.

Special attention must be given to road signs and markings in urban areas. Pedestrian crossings, traffic lights and no parking signs are special areas where drivers are expected to drive more carefully. The issue of desperate/ overzealous road traffic Officers should be put in mind in intra urban traffic. Pursue of traffic Offenders by agent of road enforcement add more dangers to the traffic environment. The issue of traffic man incompetent and lack luster attitude is another danger one must bear in mind at all time in driving in intra urban traffic environment.

Driver on intra urban driving must be cautious and avoid bumper to bumper driving as this can easily cause accident. Don't be overconfident in driving too closely to other vehicles as sudden unforeseen circumstances may warrant stopping abruptly especially when driving too closely with one another. In intra

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urban driving, driver must take cognizance of children playing along the road paths, or carefree adults that show little or no regards and unnecessary arrogance on the highway. The behavior of pedestrians must be watched most especially when driving in the night. Pedestrians in dark clothes or wearing obscured materials are people to watch on road in intra urban driving.

The condition of roads and typography of the intra urban road may be special features to look for in intra urban city driving. Sometimes there are construction problems in intra urban city road network which may constitute great danger to drivers and pedestrians. Such road constructions must be watched in urban driving.

The techniques for avoiding accident in intra urban locations also depend largely on the condition of the vehicle. Skillfulness and knowledge of the traffic rules and regulations could be of great help in driving intra urban conditions. Roads built in between houses and too closely to human habitations to due to development and other unforeseen circumstances are also common but important features to be careful about in intra city urban traffic environments. Good breaking system of vehicle is required for vehicles plying the intra urban traffic environment as there may be sudden breaking of vehicle due to junctions, diversion, or pedestrians' incursion and recklessness of other road user.