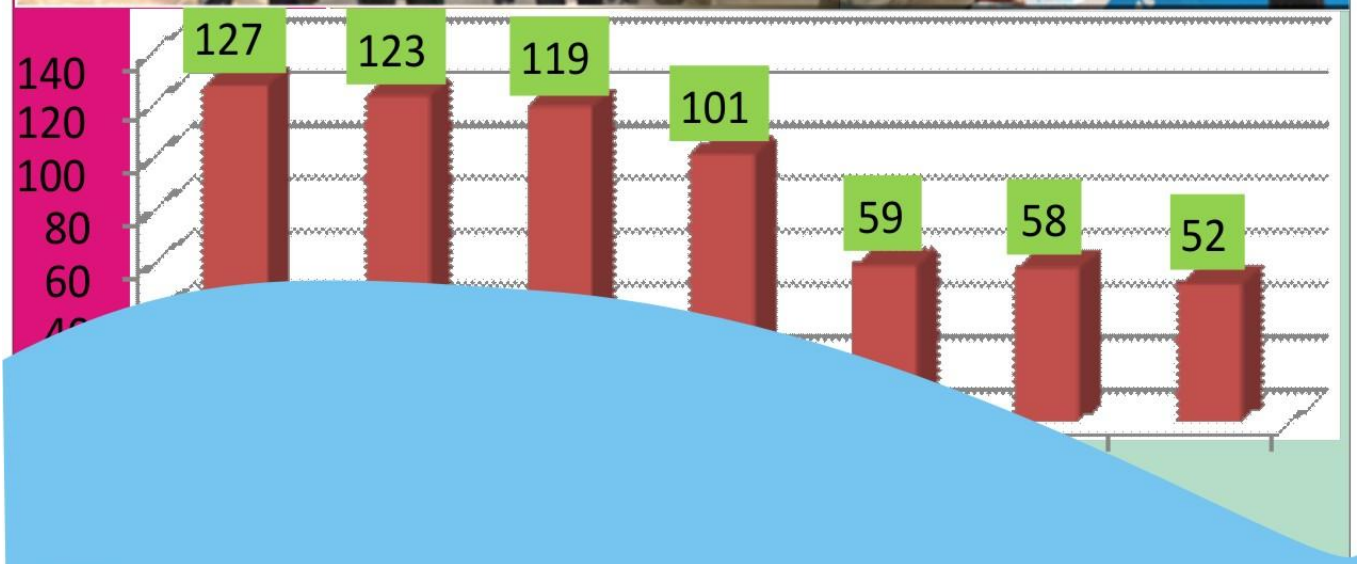
FEDERAL ROAD SAFETY CORPS
NATIONAL HEADQUARTERS, ABUJA

POLICY, RESEARCH AND STATISTICS DEPARTMENT



THE PATHFINDER

A Transport Digest Publication

of PRS Department

Vol. III, December, 2013

TABLE OF CONTENTS

EDITORIAL BOARD

Dr. Kayode Olagunju

Publisher

OR Salam

Editor-In Chief

AM SANNI
-Deputy Editor In Chief

NI EZEOMA
-Editorial Director

FM KALU
-Associate Editor

IK OKWO
-Deputy Associate Editor

ST ADEBAYO
-Senior Associate Editor

FO ARMAH
-Copy Editor

FROM THE PUBLISHER

The month of December every year marks the end of activities but for FRSC, it is a month of uphill task in terms of increased vehicular movement across the entire country and a period to combat and reduce Road Traffic Crashes (RTCs).

A cursory look at the crash statistics indicates an upward trend especially towards the end of last quarter of 2013. This development has placed a high demand of performance on the Corps' resources, personnel and equipment both to deliver result and make Nigerian roads safer especially during the yuletide.

In this December edition of the pathfinder, data on road traffic crashes for the month of December 2013 is presented and compared with the previous month. Also, age and gender analysis of casualties involved in road crashes for December, executive summary of traffic count along some six identified crash prone corridors as well as an appraisal on FRSC Special intervention patrols and its impact on road traffic crashes in year 2013 have been included for readers delight. This publication also presents to readers the projected road crash statistics for the year 2014 based on existing statistical data available in the Corps.

This monthly publication will no doubt enliven Staff on crash statistics and trend in Nigeria and also broaden the Staff perspective on current issues in the Corps as they unfold on monthly basis with regards to road traffic crashes.

Happy New Year!

Kayode OLAGUNJU, Ph.D

FROM THE EDITOR-IN-CHIEF

Thank you for keeping the faith with us. We at Pathfinder are keeping up the spirit to give you the picture through the data and information for your understanding of quantitative and qualitative aspects of the corps.

In this edition we have December RTC data; comparison of November and December 2013 RTC data. Report of Categories of vehicles involved in Crashes for the month of December 2013 is included, and comparison of vehicles involved in crashes in November and December 2013 is available. We have something on Age and Gender analysis of Casualties involved in RTC in Dec 2013.We included Route analyses for the month of December so as to give a concise picture of trend in each route observed. Executive summary of RTC and Traffic Count conducted along crash prone routes from week 32-36 of 2013 is also included. Analysis of trend of RTC and Special Intervention patrols in 2013 is reflected in this digest for our readers to feel and see the efforts of the corps in responding to situations as they arise: Our Crash Prevention capability not be in doubt.

Our contributor Mr Adewale T. Akande, a Road Safety Consultant based in Spain made a write up on Becoming a Responsible and Safe Driver. The material communicates to anyone interested in becoming a good driver.
So, we have done it again. Wishing you happy reading.

OR Salam
Assistant Corps Commander.

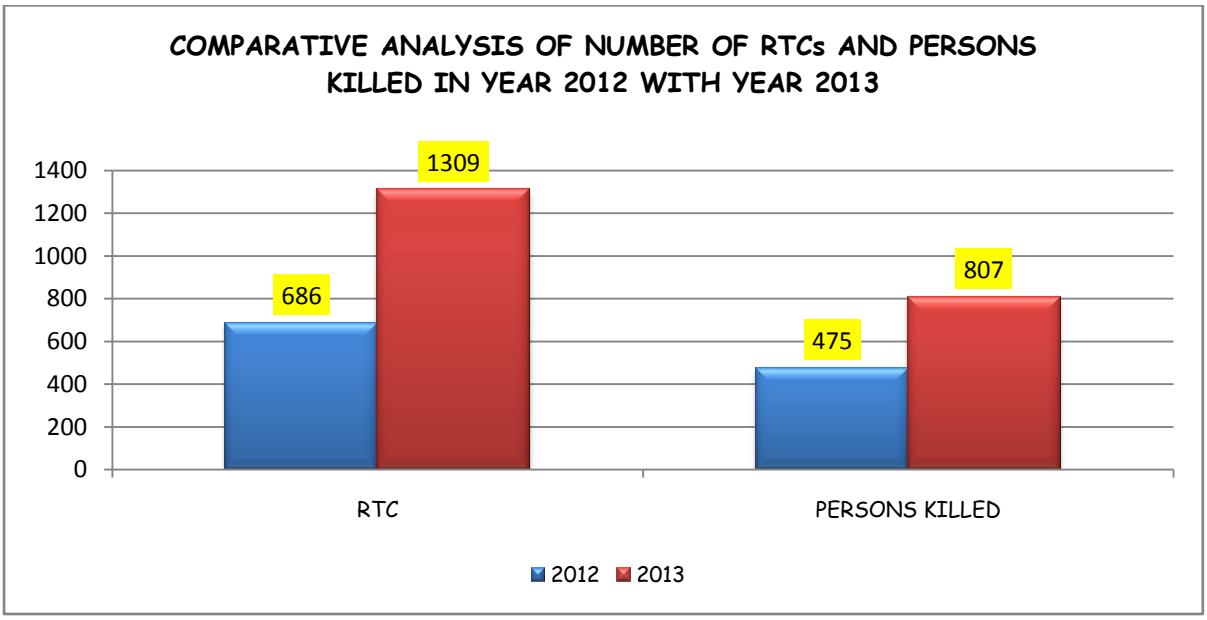
ROAD TRAFFIC CRASH DATA FOR DECEMBER 2013

RTC DECEMBER 2013 COMPARED WITH NOVEMBER 2013

Month	FATAL CASES	SERIOUS CASES	MINOR CASES	TOTAL CASES	PERSONS KILLED	PERSONS INJURED	TOTAL CASUALTY	CAR	TRUCK	TRAILER/ TANKER	BUS	M/C	TRI-CYCLE	BI-CYCLE	TOTAL VEHICLES
November	246	651	98	995	447	2974	3421	728	294	105	73	331	14	0	1545
December	393	799	117	1309	807	4109	4916	881	419	188	100	373	28	8	1997

COMPARATIVE ANALYSIS OF NUMBER OF ROAD TRAFFIC CRASHES AND PERSONS KILLED IN DECEMBER 2012 AND 2013

MONTH	RTC 2012	RTC 2013	% INCREASE/ DECREASE	PERSONS KILLED 2012	PERSONS KILLED 2013	% INCREASE/ DECREASE
December	686	1309	91% increase	475	807	70% increase



RTC ON STATE BASIS FOR THE MONTH OF DECEMBER, 2013

COMMAND	ROAD TRAFFIC CRASHES			TOTAL RTC	CASUALTY		TOTAL CASUALTY	PERSONS INVOLVED
	FATAL	SERIOUS	MINOR		KILLED	INJURED		
ABIA	4	5	0	9	3	40	43	79
ADAMAWA	7	27	4	38	14	83	97	169
AKWA IBOM	2	3	0	5	3	31	34	52
ANAMBRA	8	20	7	35	9	74	83	262
BAUCHI	16	38	2	56	32	227	259	445
BAYELSA	1	4	3	8	3	49	52	76
BENUE	17	25	0	42	25	117	142	202
BORNO	1	0	0	1	1	2	3	5
CROSS RIVER	5	8	1	14	10	55	65	89
DELTA	23	30	5	58	42	187	229	395
EBONYI	4	12	1	17	6	53	59	103
EDO	6	11	2	19	7	55	62	109
EKITI	0	3	0	3	0	3	3	12
ENUGU	8	16	7	31	15	116	131	281
FCT ABUJA	31	127	29	187	48	375	423	924
GOMBE	9	18	0	27	22	194	216	304
IMO	8	19	7	34	12	91	103	195
JIGAWA	8	8	0	16	5	37	42	62
KADUNA	37	44	4	85	83	274	357	654
KANO	12	31	0	43	51	223	274	370
KATSINA	14	15	1	30	44	125	169	233
KEBBI	4	11	0	15	8	28	36	74
KOGI	18	11	3	32	35	140	175	278
KWARA	7	16	6	29	10	43	53	126
LAGOS	9	24	7	40	19	104	123	343

NASARAWA	16	78	11	105	33	213	246	584
NIGER	14	49	5	68	32	235	267	421
OGUN	18	15	2	35	33	111	144	295
ONDO	13	19	2	34	18	88	106	199
OSUN	13	7	1	21	28	121	149	217
OYO	22	10	0	32	57	155	212	282
PLATEAU	9	32	1	42	16	122	138	223
RIVERS	6	13	5	24	5	38	43	103
SOKOTO	2	11	0	13	17	50	67	76
TARABA	4	9	0	13	23	46	69	89
YOBE	4	6	0	10	14	74	88	138
ZAMFARA	13	24	1	38	24	130	154	209
TOTAL	**393**	**799**	**117**	**1309**	**807**	**4109**	**4916**	**8678**

RTC ON STATE BASIS: DECEMBER COMPARED WITH NOVEMBER, 2013.

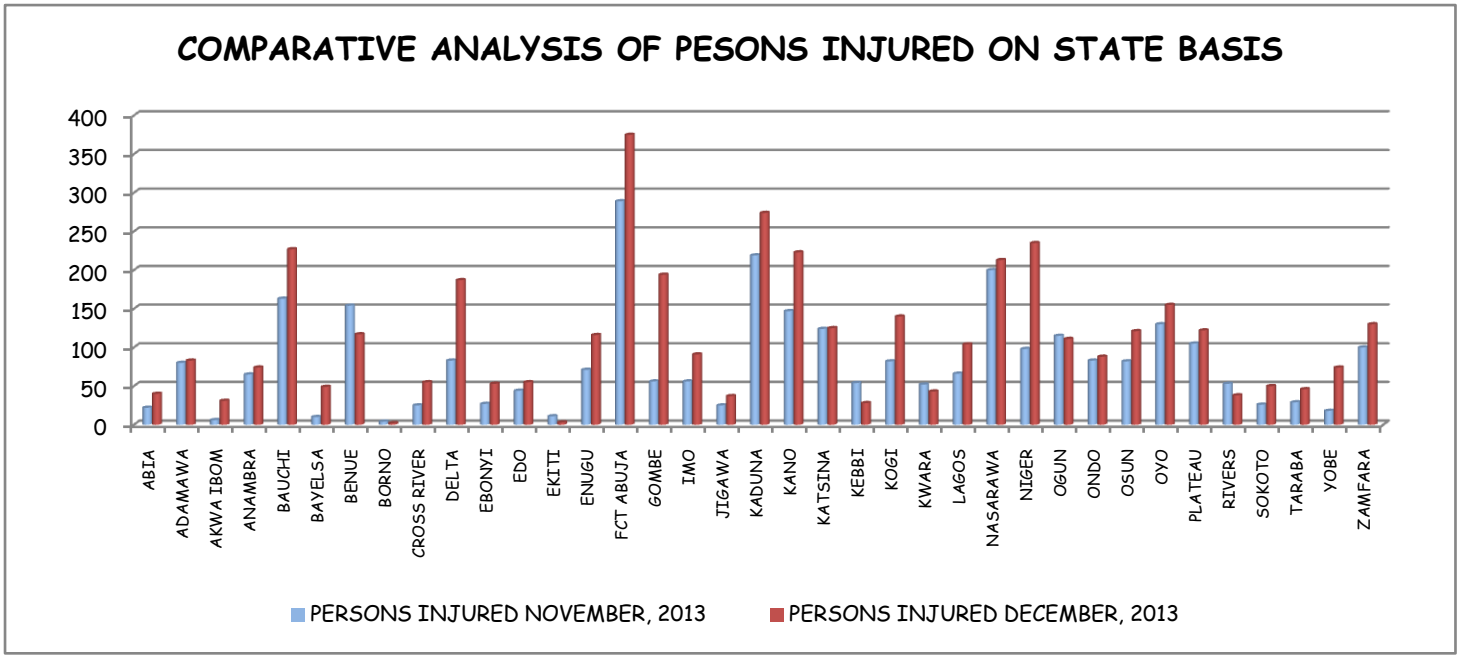
COMMAND	TOTAL RTC		PERSONS INJURED		PERSONS KILLED		TOTAL CASUALTY		PERSONS INVOLVED	
	NOVEMBER 2013	DECEMBER 2013	NOVEMBER 2013	DECEMBER 2013	NOVEMBER 2013	DECEMBER 2013	NOVEMBER 2013	DECEMBER 2013	NOVEMBER 2013	DECEMBER 2013
ABIA	11	9	22	40	0	3	22	43	43	79
ADAMAWA	35	38	80	83	3	14	83	97	171	169
AKWA IBOM	7	5	6	31	3	3	9	34	16	52
ANAMBRA	21	35	65	74	3	9	68	83	161	262
BAUCHI	50	56	163	227	22	32	185	259	293	445
BAYELSA	11	8	10	49	10	3	20	52	69	76
BENUE	32	42	154	117	14	25	168	142	246	202
BORNO	1	1	4	2	0	1	4	3	8	5
CROSS RIVER	13	14	25	55	4	10	29	65	70	89
DELTA	28	58	83	187	9	42	92	229	194	395
EBONYI	9	17	27	53	3	6	30	59	87	103
EDO	18	19	44	55	8	7	52	62	141	109
EKITI	5	3	11	3	1	0	12	3	22	12
ENUGU	17	31	71	116	3	15	74	131	133	281
FCT ABUJA	146	187	289	375	30	48	319	423	720	924
GOMBE	12	27	56	194	13	22	69	216	92	304
IMO	18	34	56	91	7	12	63	103	137	195
JIGAWA	10	16	25	37	3	5	28	42	40	62
KADUNA	63	85	219	274	59	83	278	357	443	654
KANO	44	43	147	223	19	51	166	274	251	370
KATSINA	26	30	124	125	34	44	158	169	193	233
KEBBI	17	15	54	28	4	8	58	36	73	74
KOGI	20	32	82	140	28	35	110	175	193	278
KWARA	19	29	52	43	18	10	70	53	129	126

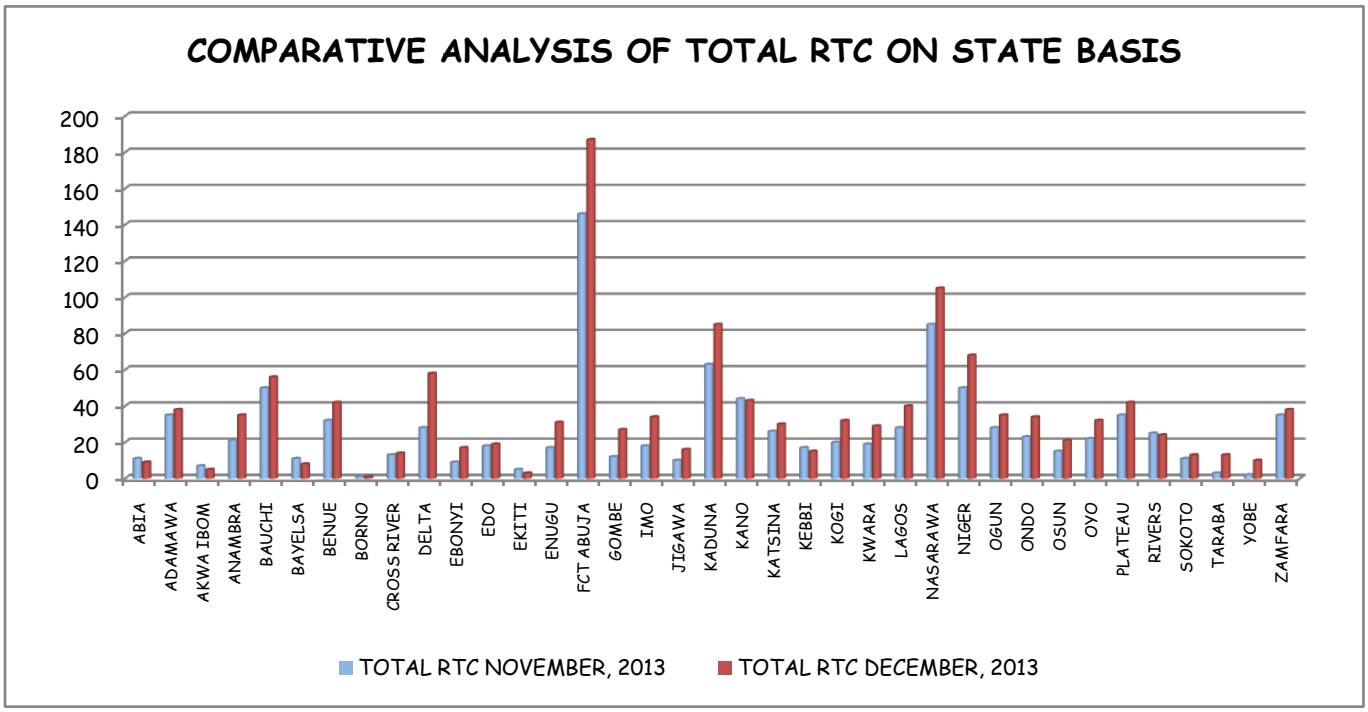
LAGOS	28	40	66	104	14	19	80	123	212	343
NASARAWA	85	105	200	213	23	33	223	246	379	584
NIGER	50	68	98	235	12	32	110	267	212	421
OGUN	28	35	115	111	23	33	138	144	227	295
ONDO	23	34	83	88	11	18	94	106	238	199
OSUN	15	21	82	121	15	28	97	149	147	217
OYO	22	32	130	155	21	57	151	212	203	282
PLATEAU	35	42	105	122	2	16	107	138	258	223
RIVERS	25	24	53	38	7	5	60	43	133	103
SOKOTO	11	13	26	50	6	17	32	67	46	76
TARABA	3	13	29	46	3	23	32	69	35	89
YOBE	2	10	18	74	0	14	18	88	29	138
ZAMFARA	35	38	100	130	12	24	112	154	166	209
TOTAL	**995**	**1309**	**2974**	**4109**	**447**	**807**	**3421**	**4916**	**6210**	**8678**

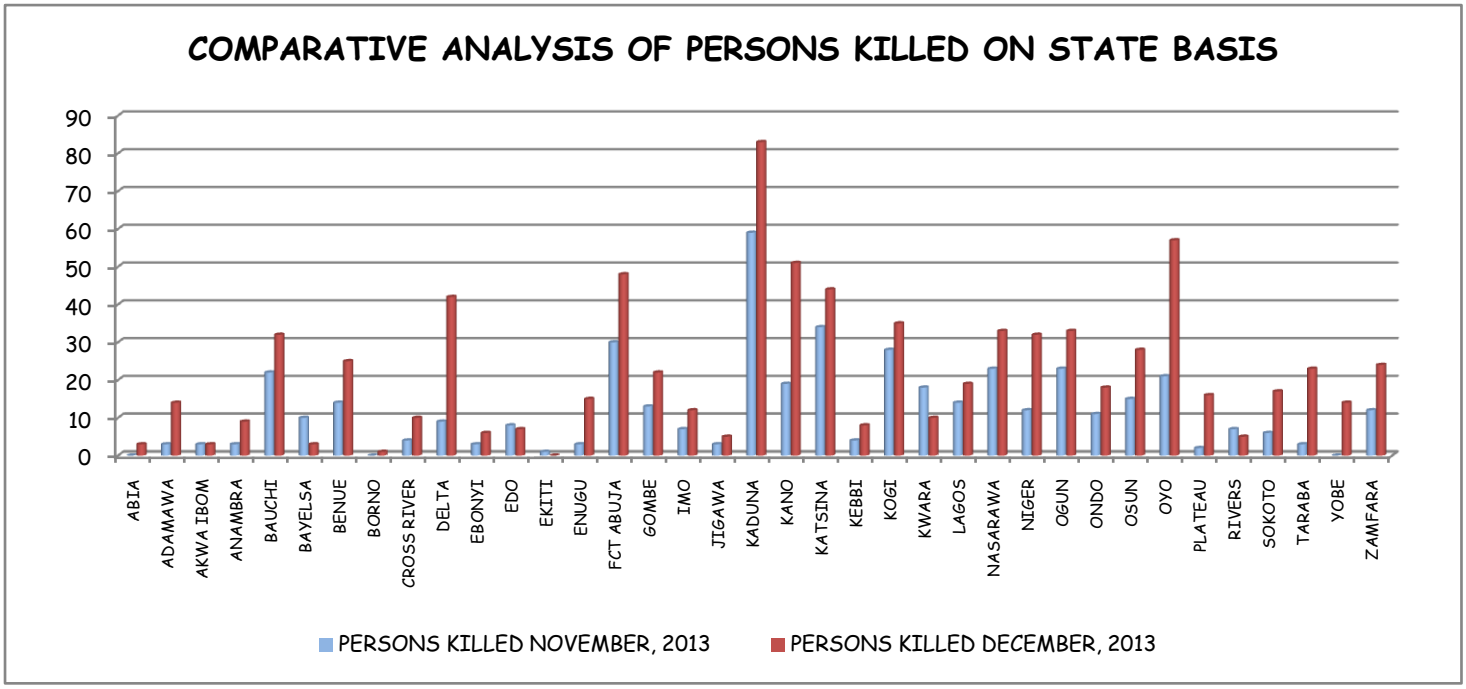
DECEMBER 2013 SEVERITY INDEX (SI) ON STATE BASIS

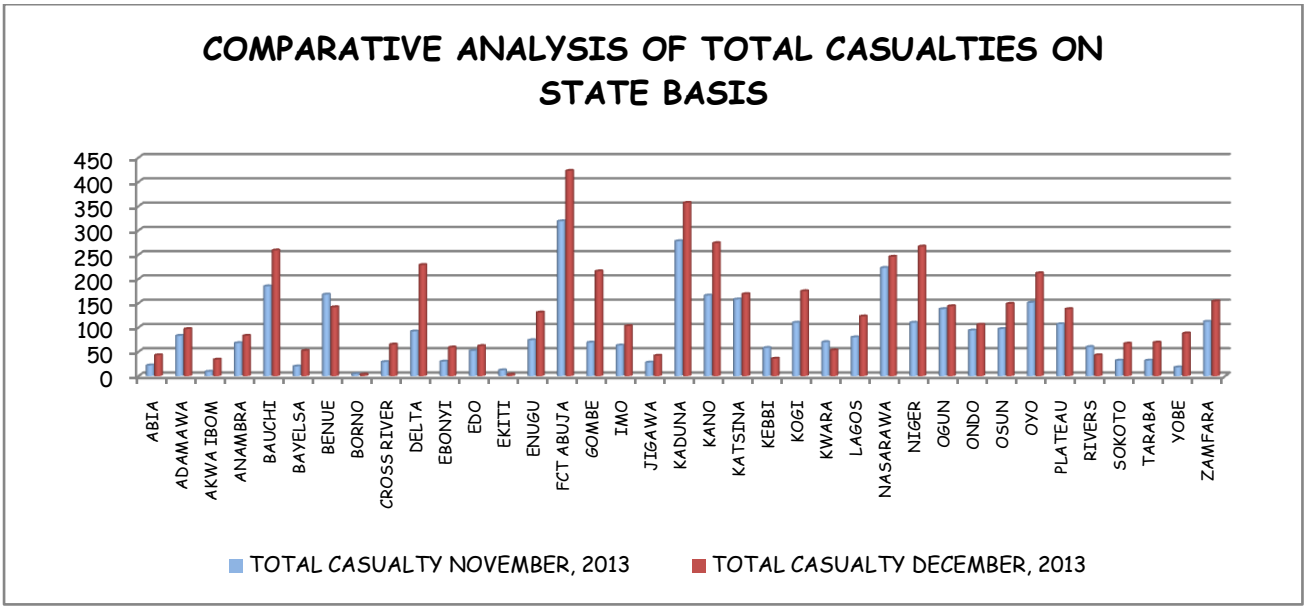
COMMAND	TOTAL RTC	PERSONS KILLED	*SEVERITY INDEX (No.DEATH/TOTAL CRASHES
Oyo	32	57	1.78
Taraba	13	23	1.77
Katsina	30	44	1.47
Yobe	10	14	1.40
Osun	21	28	1.33
Sokoto	13	17	1.31
Kano	43	51	1.19
Kogi	32	35	1.09
Borno	1	1	1.00
Kaduna	85	83	0.98
Ogun	35	33	0.94
Gombe	27	22	0.81
Delta	58	42	0.72
Cross River	14	10	0.71
Zamfara	38	24	0.63
Akwa Ibom	5	3	0.60
Benue	42	25	0.60
Bauchi	56	32	0.57
Kebbi	15	8	0.53
Ondo	34	18	0.53

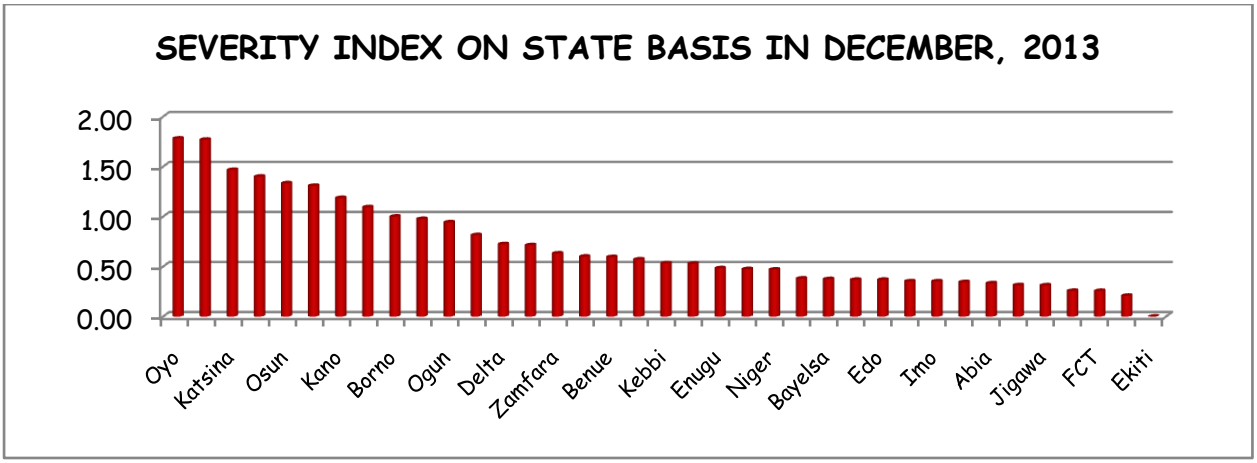
Enugu	31	15	0.48
Lagos	40	19	0.48
Niger	68	32	0.47
Plateau	42	16	0.38
Bayelsa	8	3	0.38
Adamawa	38	14	0.37
Edo	19	7	0.37
Ebonyi	17	6	0.35
Imo	34	12	0.35
Kwara	29	10	0.34
Abia	9	3	0.33
Nasarawa	105	33	0.31
Jigawa	16	5	0.31
Anambra	35	9	0.26
FCT	187	48	0.26
Rivers	24	5	0.21
Ekiti	3	0	0.00
TOTAL	**1309**	**807**	**0.62**

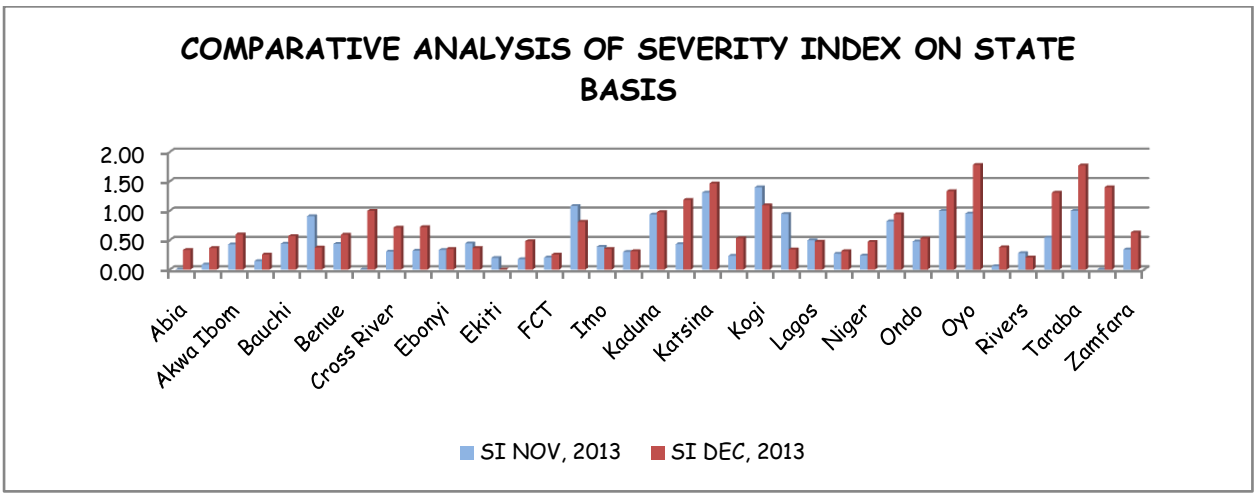

COMPARATIVE ANALYSIS OF PESONS INJURED ON STATE BASIS
400
350
300
250
200
150
100
50
0
ABIA
ADAMAWA
AKWA IBOM
ANAMBRA
BAUCHI
BAYELSA
BENUE
BORNO
CROSS RIVER
DELTA
EBONYI
EDO
EKITI
ENUGU
FCT ABUJA
GOMBE
IMO
JIGAWA
KADUNA
KANO
KATSINA
KEBBI
KOGI
KWARA
LAGOS
NASARAWA
NIGER
OGUN
ONDO
OSUN
OYO
PLATEAU
RIVERS
SOKOTO
TARABA
YOBE
ZAMFARA
PERSONS INJURED NOVEMBER, 2013
PERSONS INJURED DECEMBER, 2013

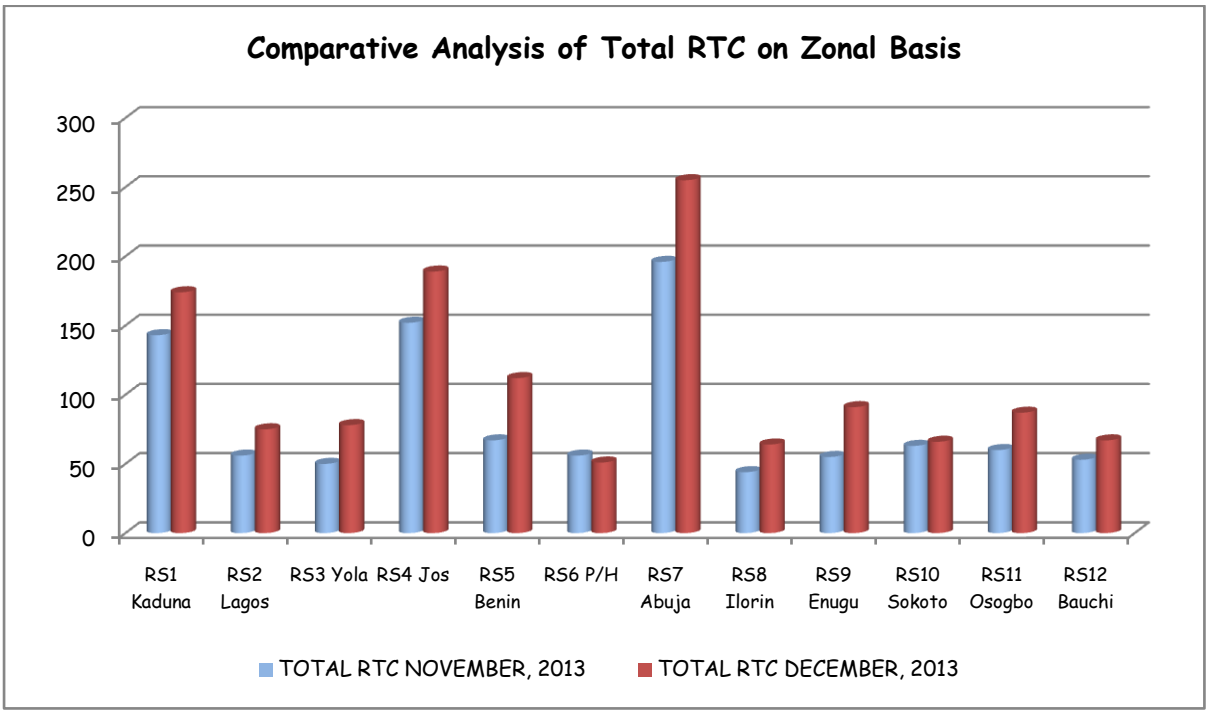

COMPARATIVE ANALYSIS OF TOTAL RTC ON STATE BASIS
200
180
160
140
120
100
80
60
40
20
0
ABIA
ADAMAWA
AKWA IBOM
ANAMBRA
BAUCHI
BAYELSA
BENUE
BORNO
CROSS RIVER
DELTA
EBONYI
EDO
EKITI
ENUGU
FCT ABUJA
GOMBE
IMO
JIGAWA
KADUNA
KANO
KATSINA
KEBBI
KOGI
KWARA
LAGOS
NASARAWA
NIGER
OGUN
ONDO
OSUN
OYO
PLATEAU
RIVERS
SOKOTO
TARABA
YOBE
ZAMFARA
TOTAL RTC NOVEMBER, 2013
TOTAL RTC DECEMBER, 2013

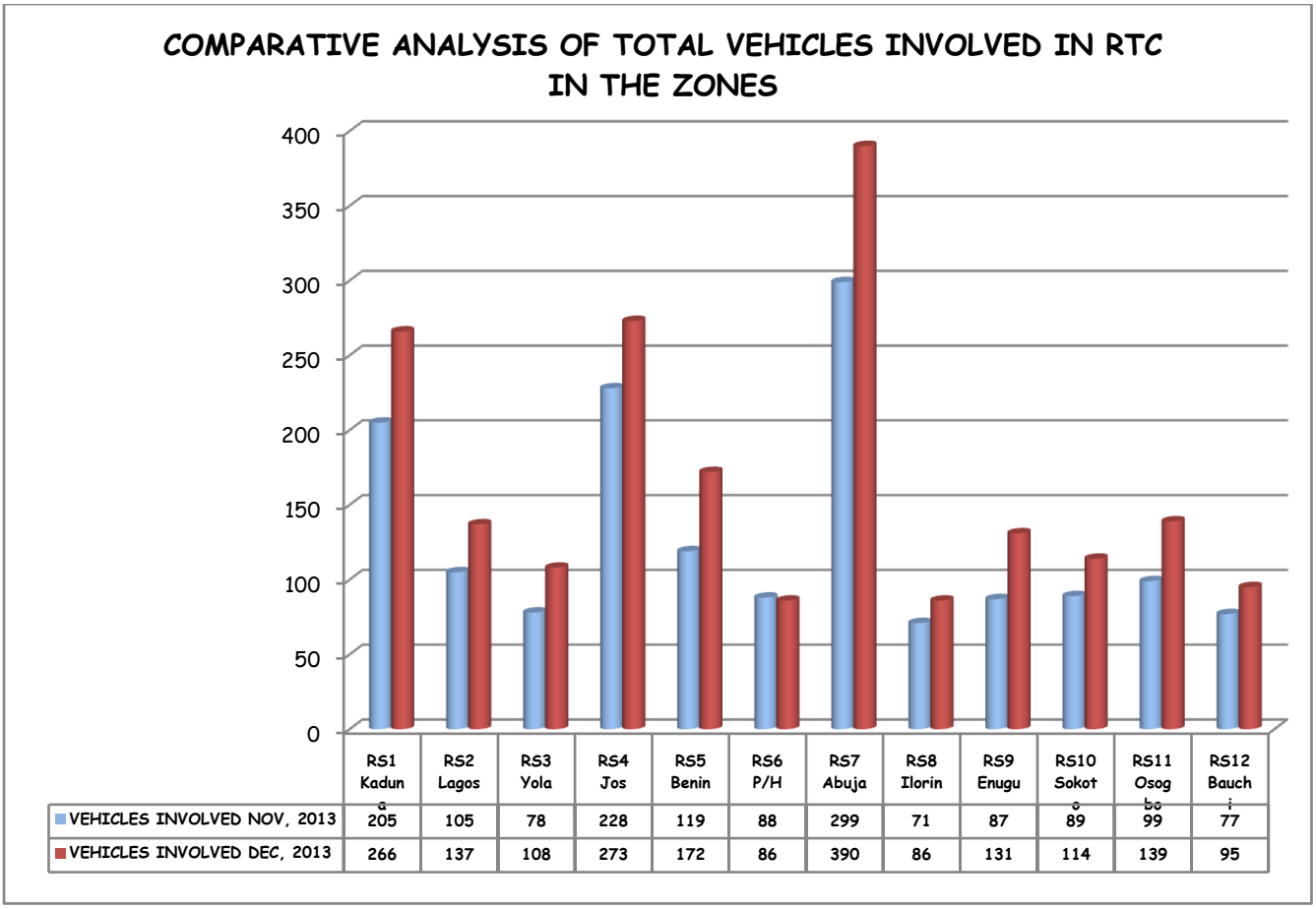

COMPARATIVE ANALYSIS OF PERSONS KILLED ON STATE BASIS
90
80
70
60
50
40
30
20
10
0
ABIA
ADAMAWA
AKWA IBOM
ANAMBRA
BAUCHI
BAYELSA
BENUE
BORNO
CROSS RIVER
DELTA
EBONYI
EDO
EKITI
ENUGU
FCT ABUJA
GOMBE
IMO
JIGAWA
KADUNA
KANO
KATSINA
KEBBI
KOGI
KWARA
LAGOS
NASARAWA
NIGER
OGUN
ONDO
OSUN
OYO
PLATEAU
RIVERS
SOKOTO
TARABA
YOBE
ZAMFARA
PERSONS KILLED NOVEMBER, 2013
PERSONS KILLED DECEMBER, 2013

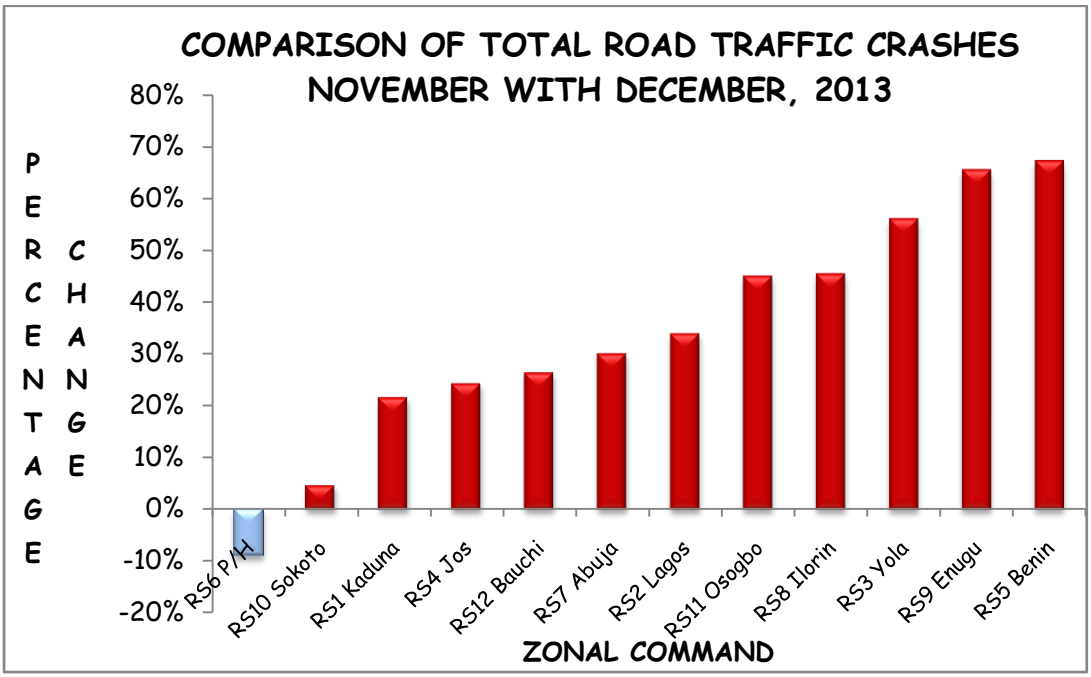

COMPARATIVE ANALYSIS OF TOTAL CASUALTIES ON STATE BASIS
450
400
350
300
250
200
150
100
50
0
ABIA
ADAMAWA
AKWA IBOM
ANAMBRA
BAUCHI
BAYELSA
BENUE
BORNO
CROSS RIVER
DELTA
EBONYI
EDO
EKITI
ENUGU
FCT ABUJA
GOMBE
IMO
JIGAWA
KADUNA
KANO
KATSINA
KEBBI
KOGI
KWARA
LAGOS
NASARAWA
NIGER
OGUN
ONDO
OSUN
OYO
PLATEAU
RIVERS
SOKOTO
TARABA
YOBE
ZAMFARA
TOTAL CASUALTY NOVEMBER, 2013
TOTAL CASUALTY DECEMBER, 2013

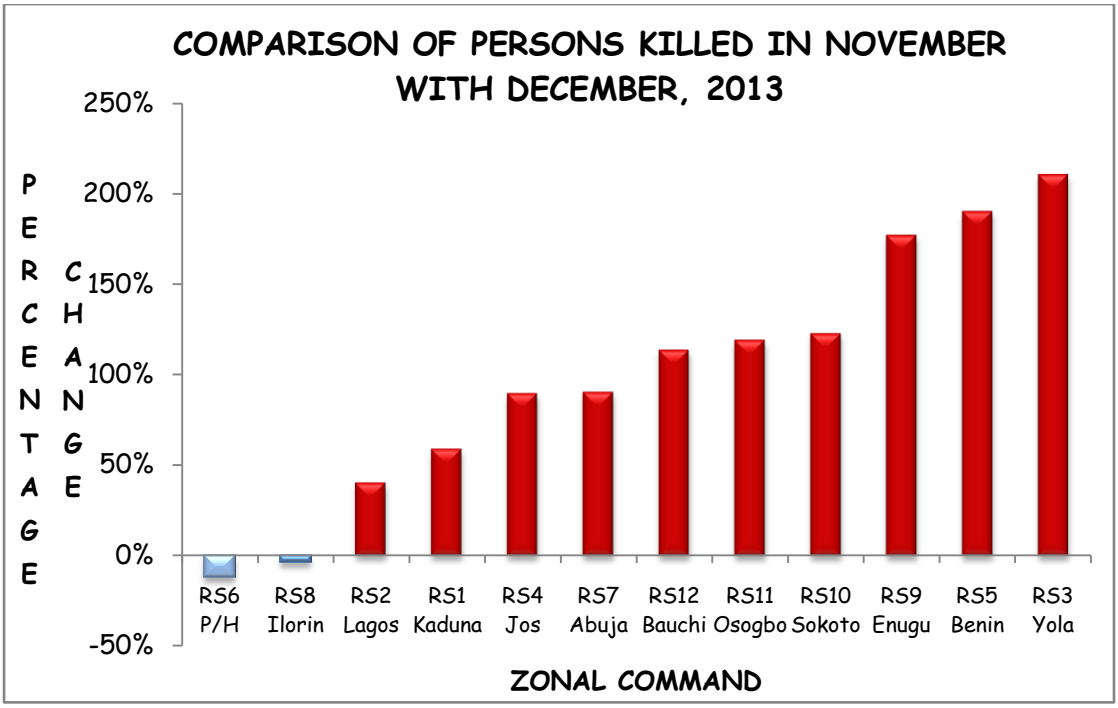

SEVERITY INDEX ON STATE BASIS IN DECEMBER, 2013
2.00
1.50
1.00
0.50
0.00
Oyo
Katsina
Osun
Kano
Borno
Ogun
Delta
Zamfara
Benue
Kebbi
Enugu
Niger
Bayelsa
Edo
Imo
Abia
Jigawa
FCT
Ekiti

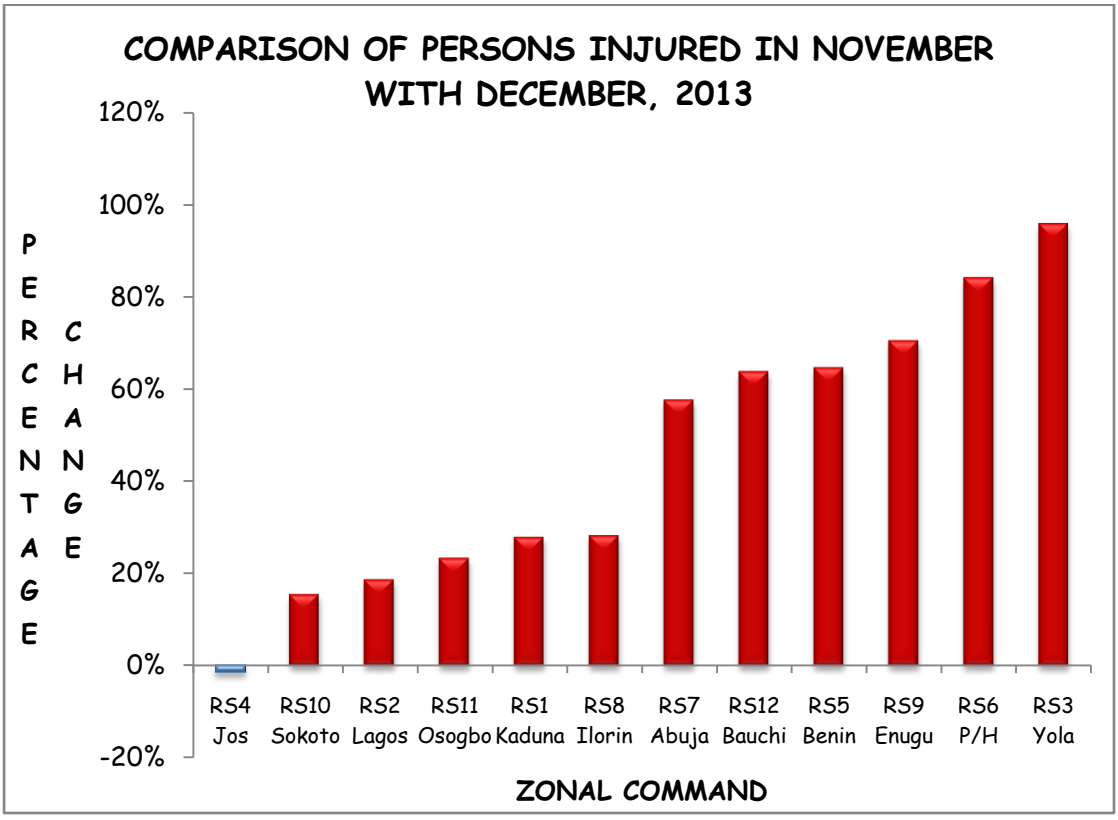

COMPARATIVE ANALYSIS OF SEVERITY INDEX ON STATE BASIS
2.00
1.50
1.00
0.50
0.00
Abia
Akwa Ibom
Bauchi
Benue
Cross River
Ebonyi
Ekiti
FCT
Imo
Kaduna
Katsina
Kogi
Lagos
Niger
Ondo
Oyo
Rivers
Taraba
Zamfara
SI NOV, 2013
SI DEC, 2013


Comparative Analysis of Total RTC on Zonal Basis
300
250
200
150
100
50
0
RS1 Kaduna
RS2 Lagos
RS3 Yola
RS4 Jos
RS5 Benin
RS6 P/H
RS7 Abuja
RS8 Ilorin
RS9 Enugu
RS10 Sokoto
RS11 Osogbo
RS12 Bauchi
TOTAL RTC NOVEMBER, 2013
TOTAL RTC DECEMBER, 2013


COMPARATIVE ANALYSIS OF TOTAL VEHICLES INVOLVED IN RTC IN THE ZONES
400
350
300
250
200
150
100
50
0
RS1 Kaduna
RS2 Lagos
RS3 Yola
RS4 Jos
RS5 Benin
RS6 P/H
RS7 Abuja
RS8 Ilorin
RS9 Enugu
RS10 Sokoto
RS11 Osogbo
RS12 Bauchi
VEHICLES INVOLVED NOV, 2013 205 105 78 228 119 88 299 71 87 89 99 77
VEHICLES INVOLVED DEC, 2013 266 137 108 273 172 86 390 86 131 114 139 95


COMPARISON OF TOTAL ROAD TRAFFIC CRASHES NOVEMBER WITH DECEMBER, 2013
PERCENTAGE CHANGE
80%
70%
60%
50%
40%
30%
20%
10%
0%
-10%
-20%
RS6 P/H
RS10 Sokoto
RS1 Kaduna
RS4 Jos
RS12 Bauchi
RS7 Abuja
RS2 Lagos
RS11 Osogbo
RS8 Ilorin
RS3 Yola
RS9 Enugu
RS5 Benin
ZONAL COMMAND


COMPARISON OF PERSONS KILLED IN NOVEMBER WITH DECEMBER, 2013
PERCENTAGE CHANGE
250%
200%
150%
100%
50%
0%
-50%
RS6 P/H
RS8 Ilorin
RS2 Lagos
RS1 Kaduna
RS4 Jos
RS7 Abuja
RS12 Bauchi
RS11 Osogbo
RS10 Sokoto
RS9 Enugu
RS5 Benin
RS3 Yola
ZONAL COMMAND


COMPARISON OF PERSONS INJURED IN NOVEMBER WITH DECEMBER, 2013
PERCENTAGE CHANGE
120%
100%
80%
60%
40%
20%
0%
-20%
RS4 Jos
RS10 Sokoto
RS2 Lagos
RS11 Osogbo
RS1 Kaduna
RS8 Ilorin
RS7 Abuja
RS12 Bauchi
RS5 Benin
RS9 Enugu
RS6 P/H
RS3 Yola
ZONAL COMMAND

AGE AND GENDER ANALYSIS OF CASUALTIES INVOLVED IN RTC IN DECEMBER, 2013

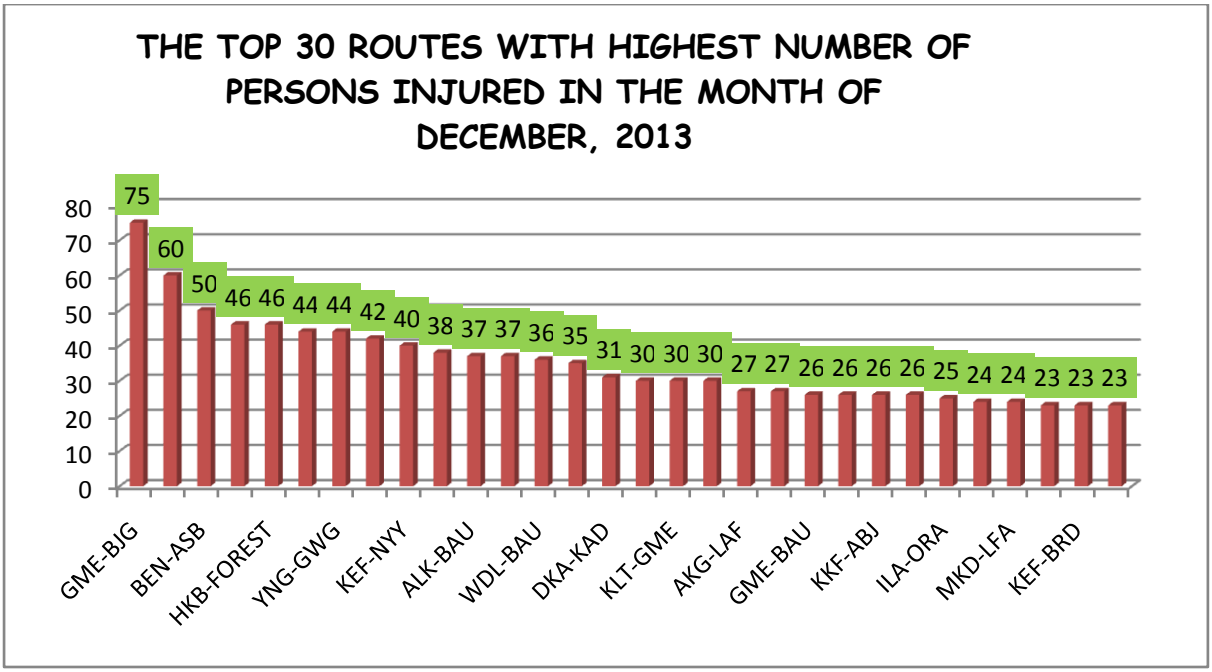
ZONE	KILLED					INJURED				
	ADULT		CHILDREN			ADULT		CHILDREN		
	MALE	FEMALE	MALE	FEMALE	TOTAL	MALE	FEMALE	MALE	FEMALE	TOTAL
RS1 Kaduna	120	24	29	10	**183**	476	97	60	26	**659**
RS2 Lagos	40	8	4	0	**52**	145	54	12	4	**215**
RS3 Yola	42	13	2	2	**59**	223	82	12	6	**323**
RS4 Jos	63	7	3	1	**74**	312	116	12	12	**452**
RS5 Benin	33	14	11	0	**58**	199	92	14	11	**316**
RS6 P/H	19	2	0	0	**21**	102	57	5	9	**173**
RS7 Abuja	58	11	4	7	**80**	424	127	31	28	**610**
RS8 Ilorin	28	14	1	2	**45**	130	46	8	2	**186**
RS9 Enugu	22	11	2	1	**36**	192	89	11	8	**300**
RS10 Sokoto	35	9	4	1	**49**	175	21	1	11	**208**
RS11 Osogbo	72	25	2	4	**103**	211	128	11	14	**364**
RS12 Bauchi	19	18	6	4	**47**	141	111	39	12	**303**
TOTAL	**551**	**156**	**68**	**32**	**807**	**2730**	**1020**	**216**	**143**	**4109**

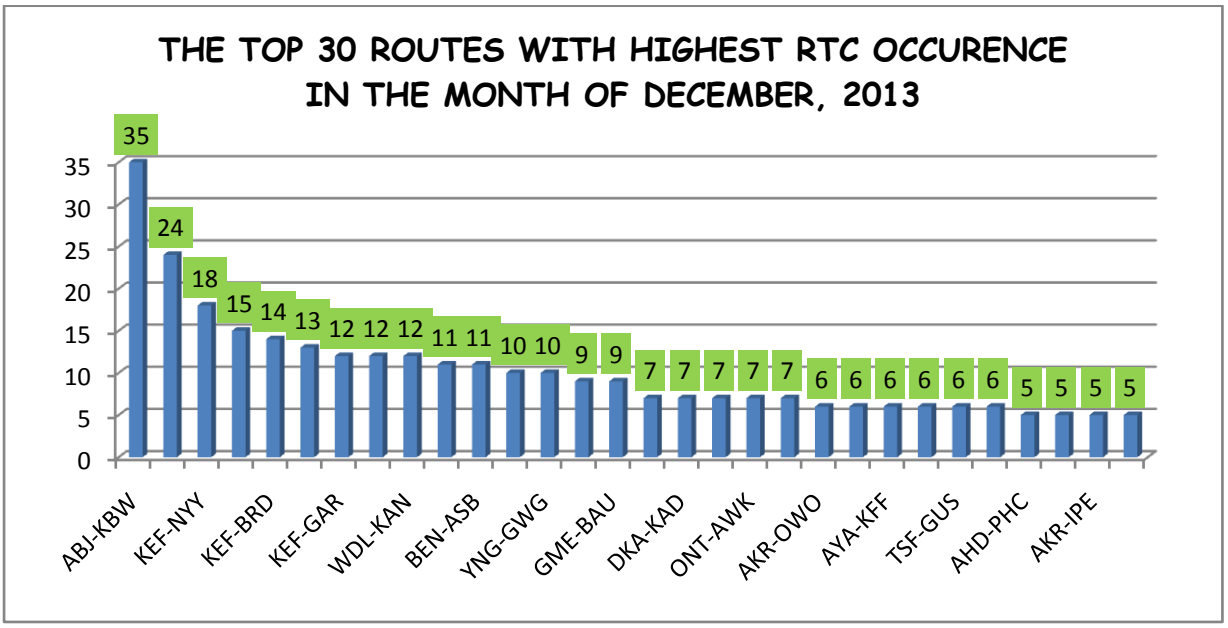
DECEMBER 2013: ROUTE ANALYSIS (WEEK 49-52)

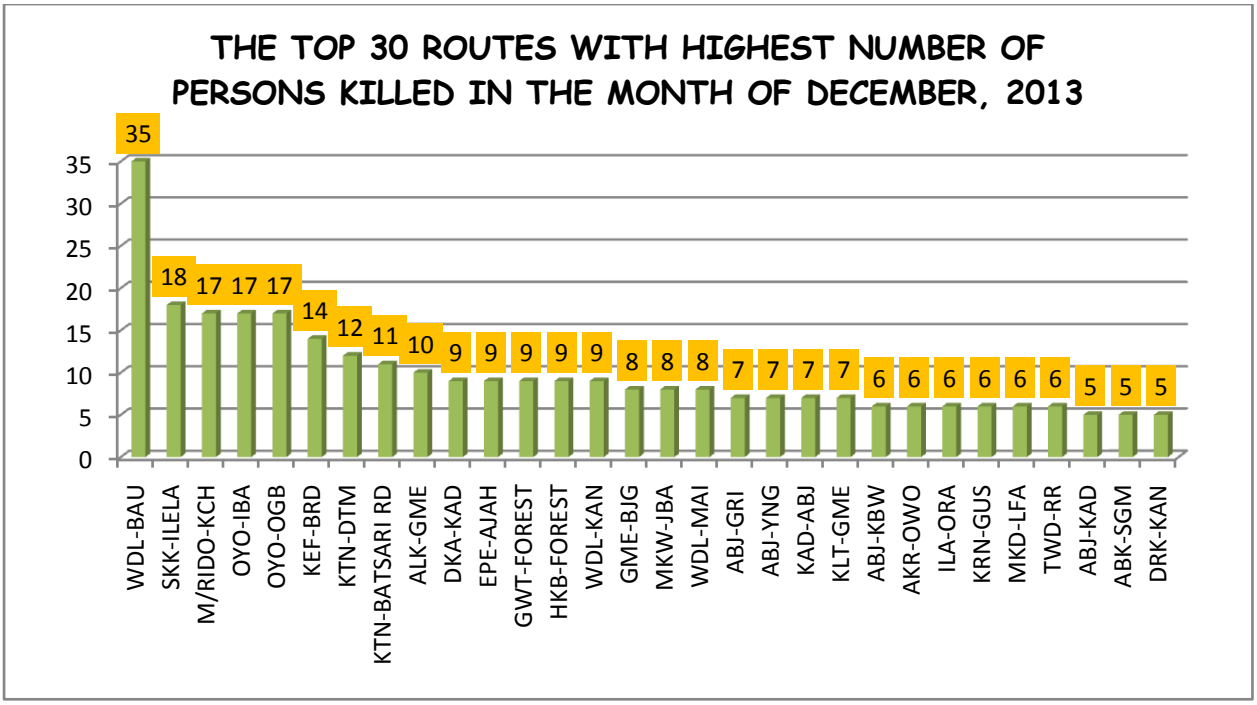
ROUTE	RTC	TOTAL INJURED	TOTAL KILLED	TOTAL INVOLVED
WUDIL-BAUCHI	7	36	35	84
SOKOTO-ILELA	2	27	18	42
M/RIDO-KACHIA	5	30	17	50
OYO-IBADAN	3	21	17	40
OYO-OGBOMOSHO	2	21	17	38
KEFFI-BARDE	14	23	14	66
KATSINA-DAMATURU	2	3	12	16
KATSINA-BATSARI RD	2	8	11	22
ALKALERI-GOMBE	5	24	10	51
DUGUNKUKA-KADUNA	7	31	9	85
EPE-AJAH	2	7	9	16
GWANTU-FOREST	2	3	9	12
HAWANKIBO-FOREST	13	46	9	68
WUDIL-KANO	12	37	9	96
GOMBE-BAJOGA	2	75	8	92
MOKWA-JEBBA	2	20	8	30
WUDIL-MAI	2	2	8	21
ABUJA-GIRI	24	35	7	110
ABAJI-YANGOJI	10	23	7	70
KADUNA-ABUJA	6	17	7	39
KALTUNGU-GOMBE	3	30	7	48
ABUJA-KUBWA	35	60	6	141
AKURE-OWO	6	8	6	39
ILA-ORA	2	25	6	32
KAURA NAMUDA -GUSAU	4	17	6	25
MAKURDI -LAFIA	7	24	6	45
TUNDUN WADA-TORO	5	20	6	31
ABUJA-KADUNA	9	15	5	66
ABEOKUTA-SAGAMU	2	6	5	12
DAURA-KANO	4	18	5	35
IBADAN-OGBOMOSHO	4	30	5	41
KEFFI-GARAKU	12	18	5	34
KEFFI-NYANYA	18	40	5	94
KOTONKARFE-ABUJA	2	26	5	61
POTISKUM-KANO	5	23	5	59
TSAFE-GUSAU	6	26	5	50
YANGOJI-ABUJA	15	38	5	78
AUCHI-OKPELA	2	0	4	4
OGBOMOSHO-IBADAN	4	17	4	27
KADUNA-DUGUN KUKA	5	44	4	66
LOKOJA-KOTONKARFE	5	8	4	18

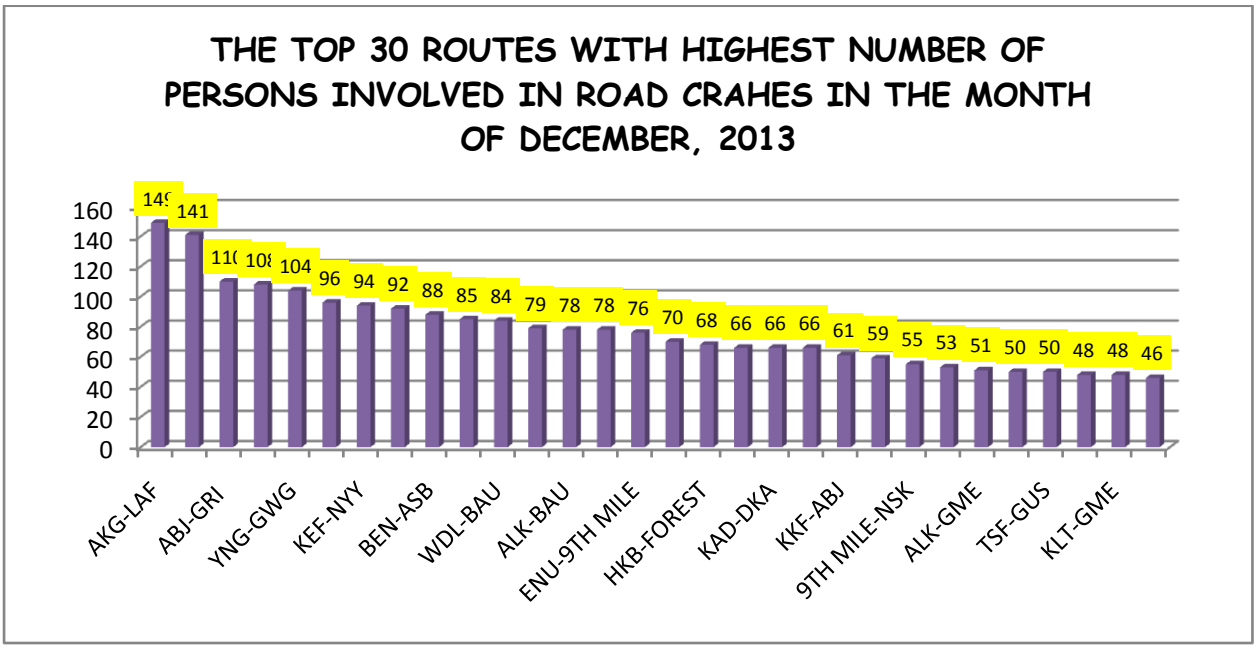
SAGAMU-IJEBU ODE	2	4	4	17
SAGAMU-MOWE	2	5	4	22
TUNDU WADA -FAGGIE	3	12	4	28
UGHELLI-PATANI	4	5	4	24
YOLA-NUMAN	6	16	4	33
ASABA-BENIN	2	10	3	16
ENUGU-OKIGWE	2	4	3	8
FUNTUA-SOKOTO	2	14	3	19
IBADAN-LAGOS	5	17	3	53
IPETU-ILESHA	4	26	3	45
LAGOS-ABEOKUTA	2	18	3	41
LAGOS-IBADAN	12	23	3	108
ILORIN-OGBOMOSHO	2	6	3	19
ORE-LAGOS	3	7	3	22
9TH MILE-NSUKKA	4	11	2	55
ABEOKUTA-LAGOS	4	10	2	44
AGBOR-ASABA	2	18	2	27
ALIADE-OTUKPO	4	13	2	20
ASABA-ONITSHA	5	3	2	15
BENIN-ASABA	11	50	2	88
BENIN-ORE	3	18	2	21
BIRNIN YERO-KADUNA	4	16	2	48
EPE-IKORODU	2	3	2	6
GOMBE-BAUCHI	9	26	2	46
GOMBE-YOLA	3	10	2	14
GEREI -JEMETA	4	11	2	15
JOS-ZARIA	5	20	2	45
ONISHA-AWKA	7	23	2	79
YANGOJI-GWAGWALADA	10	44	2	104
ABUJA-KEFFI	4	6	1	11
ABUJA-LOKOJA	4	9	1	31
AHODA-PORT HARCOURT	5	18	1	45
AKWANGA-ANDOKKA	3	7	1	11
AKWANGA -LAFIA	11	27	1	149
ALIADE-MAKURDI	3	22	1	26
AYA-KEFFI	6	4	1	26
BAUCHI-JOS	4	10	1	25
BADAGRY - AGBARA	2	42	1	46
BADAGRY - SEME	2	7	1	22
BENIN-AGBOR	2	2	1	5
BENIN-SAPELE	3	4	1	14
ENUGU -9TH MILE	5	46	1	76
OMU ARAN-ILORIN	5	9	1	19
AGBOR-BENIN	4	10	0	15
ABAKALIKI-ENUGU	5	15	0	44

AKWANGU-KEFFI	3	15	0	31
AKWANGA-WAMBA	4	5	0	8
AKURE-IPETU ILESHA	5	7	0	18
ALKARELI-BAUCHI	7	37	0	78
ASABA-OGWACHUKWU	3	4	0	12
AWKA-ENUGU	6	3	0	36
BAUCHI-DASS	3	5	0	12
BAUCHI-GOMBE	2	18	0	21
BAUCHI-MAIDUGURI	2	3	0	37
BENIN-AKURE	3	15	0	23


THE TOP 30 ROUTES WITH HIGHEST NUMBER OF PERSONS INJURED IN THE MONTH OF DECEMBER, 2013
80
70
60
50
40
30
20
10
0
75
60
50
46 46
44 44
42
40
38
37 37
36
35
31
30 30 30
27 27
26 26 26 26
25
24 24
23 23 23
GME-BJG
BEN-ASB
HKB-FOREST
YNG-GWG
KEF-NYY
ALK-BAU
WDL-BAU
DKA-KAD
KLT-GME
AKG-LAF
GME-BAU
KKF-ABJ
ILA-ORA
MKD-LFA
KEF-BRD


THE TOP 30 ROUTES WITH HIGHEST RTC OCCURENCE IN THE MONTH OF DECEMBER, 2013
35
30
25
20
15
10
5
0
35
24
18
15
14
13
12 12 12
11 11
10 10
9
9
7 7 7 7 7
6 6 6 6 6 6
5 5 5 5
ABJ-KBW
KEF-NYY
KEF-BRD
KEF-GAR
WDL-KAN
BEN-ASB
YNG-GWG
GME-BAU
DKA-KAD
ONT-AWK
AKR-OWO
AYA-KFF
TSF-GUS
AHD-PHC
AKR-IPE


THE TOP 30 ROUTES WITH HIGHEST NUMBER OF PERSONS KILLED IN THE MONTH OF DECEMBER, 2013
35
18
17
17
17
14
12
11
10
9
9
9
9
9
8
8
8
7
7
7
7
6
6
6
6
6
6
5
5
5
0
5
10
15
20
25
30
35
WDL-BAU
SKK-ILELA
M/RIDO-KCH
OYO-IBA
OYO-OGB
KEF-BRD
KTN-DTM
KTN-BATSARI RD
ALK-GME
DKA-KAD
EPE-AJAH
GWT-FOREST
HKB-FOREST
WDL-KAN
GME-BJG
MKW-JBA
WDL-MAI
ABJ-GRI
ABJ-YNG
KAD-ABJ
KLT-GME
ABJ-KBW
AKR-OWO
ILA-ORA
KRN-GUS
MKD-LFA
TWD-RR
ABJ-KAD
ABK-SGM
DRK-KAN


THE TOP 30 ROUTES WITH HIGHEST NUMBER OF PERSONS INVOLVED IN ROAD CRAHES IN THE MONTH OF DECEMBER, 2013
149
141
110
108
104
96
94
92
88
85
84
79
78
78
76
70
68
66
66
66
61
59
55
53
51
50
50
48
48
46
0
20
40
60
80
100
120
140
160
AKG-LAF
ABJ-GRI
YNG-GWG
KEF-NYY
BEN-ASB
WDL-BAU
ALK-BAU
ENU-9TH MILE
HKB-FOREST
KAD-DKA
KKF-ABJ
9TH MILE-NSK
ALK-GME
TSF-GUS
KLT-GME

EXECUTIVE SUMMARY OF ROAD TRAFFIC CRASH AND TRAFFIC COUNT CONDUCTED ALONG CRASH PRONE ROUTES FROM WEEK 32-36, 2013

INTRODUCTION

The understanding of traffic density and situation along identified crash prone routes in relation to the road traffic crash rate or occurrence is essential in properly defining the problem and proffering a lasting scientific solution.

Arising from an analysis of road crashes from Week 32-36, 2013 a-7day traffic count exercise was conducted between the periods 23-29, Sep 2013 to determine the "Risk Level" on the following five traffic routes:

i. Abuja-Lokoja, Lokoja-Abuja routes.
ii. Zuba-Abuja, Abuja-Zuba routes.
iii. Kaduna-Tafa, Tafa-Kaduna routes.
iv. Keffi-Kaduna, Kaduna-Keffi (Barde-Keffi) routes.
v. Gusau-Sokoto, Sokoto-Gusau routes.

FINDINGS/OBSERVATIONS

a. Assessing all the routes per 10,000 vehicle population revealed that Gusau-Sokoto route had the highest Crash Risk Factor recording 52 crashes within the period of the study. Lokoja-Abuja route recorded 24 crashes, Keffi-Kaduna route;17 crashes, Keffi-Abuja route;13 crashes, Tafa-Kaduna route;10 crashes and Zuba-Abuja route (Kubwa Express); 6 crashes.
b. There are also some routes with low traffic density but high crash rates. For example, Gusau-Sokoto route.
c. Zuba-Abuja and Abuja-Zuba routes recorded the highest Average Daily Traffic (ADT) volume of 31,270 and 16,300 vehicles respectively.
d. The traffic count exercise was conducted within the period of 0600Hrs-1800Hrs. Not all vehicles transiting the routes were enumerated.
e. The count was done manually thus predisposing the count to loss of data as a result of inherent human limits. For example Abuja-Lokoja route recorded far below expected traffic volume as compared to other routes under this study.

ROUTE	AVERAGE DAILY TRAFFIC (MONDAY-SUNDAY)	TOTAL TRAFFIC PER HOUR
Lokoja-Abuja	4,903	409
Abuja-Lokoja	3,836	320
Kaduna-Tafa	3,682	307
Tafa-Kaduna	6,142	512
Zuba-Abuja	31,270	2,606
Abuja-Zuba	16,303	1,359
Keffi-Kaduna	4,822	402
Kaduna-Keffi	4,851	404
Keffi-Abuja	4,883	407
Abuja-Keffi	4,787	399
Sokoto-Gusau	2,909	242

METHODOLOGY

The traffic count exercises were carried out manually in the identified routes by Field Commands along those routes:

i. Abuja – Lokoja axis
ii. Zuba – Abuja axis
iii. Kaduna – Tafa axis
iv. Keffi – Kaduna (Barde-Keffi) axis
v. Gusau – Sokoto axis

ANALYSIS

Tables and Charts were used to clearly show traffic volume trend, average daily traffic, traffic volume by day of the week and total number of road traffic crashes along the routes.

In Table1, it can be seen that Zuba – Abuja and Abuja – Zuba recorded the highest average daily traffic volume that is 31270 and 16303 respectively.

This is closely followed by Tafa –Kaduna and Kaduna – Tafa with 6142 and 3682 respectively for the period of the traffic count exercise.

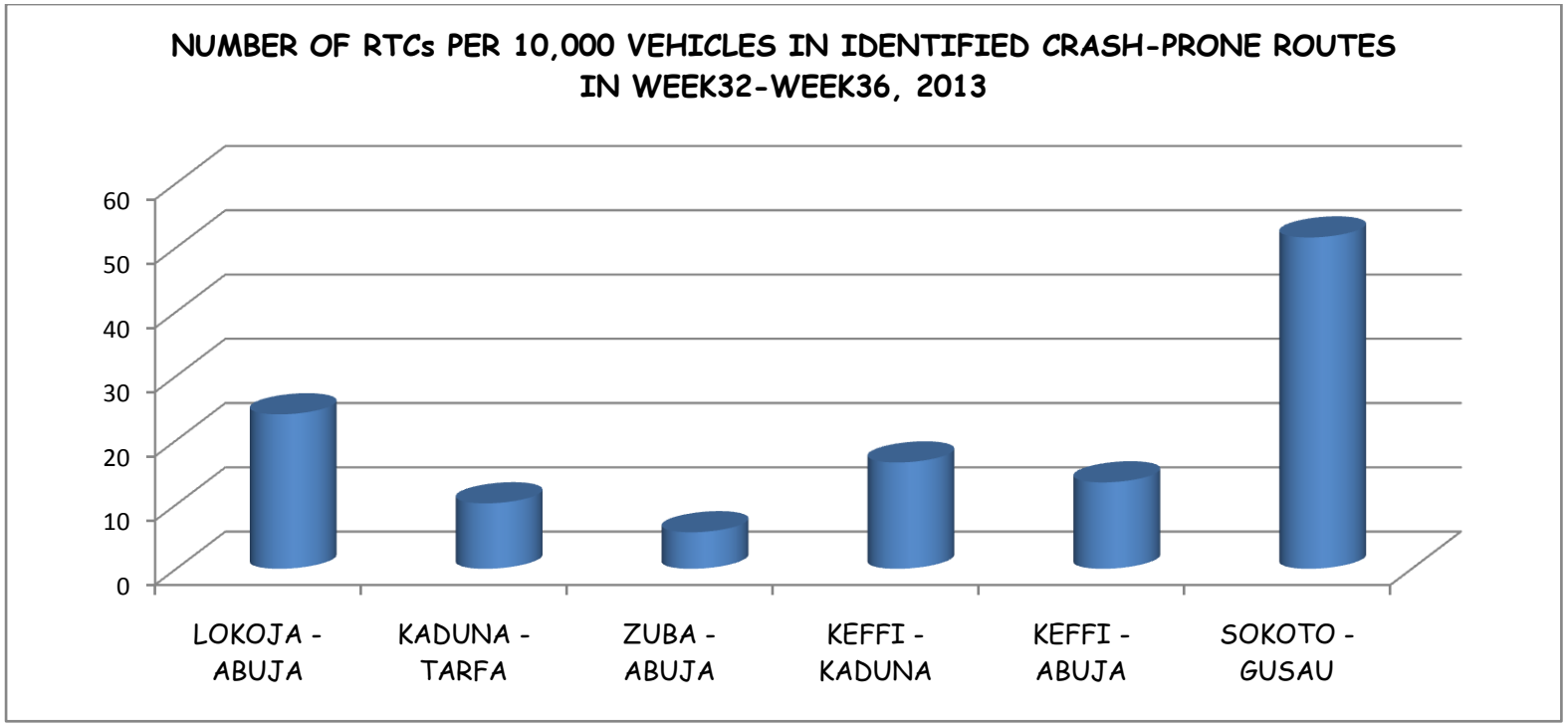
Comparative analysis of Average Daily Traffic (ADT) and the number of crashes recorded for the 5 weeks along the identified routes (i.e. week 32 – week 36, 2013) revealed in Table 2 that Gusau-Sokoto had the highest Crash-Risk Factor. The interpretation is that if all the routes were placed on the same platform of number of Average Daily Traffic volume of 10,000, Sokoto – Gusau would have recorded 52 crashes, Lokoja-Abuja axis, 24 crashes, Keffi – Kaduna axis, 17 crashes, Keffi-Abuja axis, 13 crashes, Tafa-Kaduna axis 10 crashes and Zuba-Abuja (Kubwa Express way), 6 crashes. Although, the records show that Zuba-Abuja recorded the highest number of crashes for the period under consideration, but the volume of traffic flow along this route is higher compared to other identified routes.

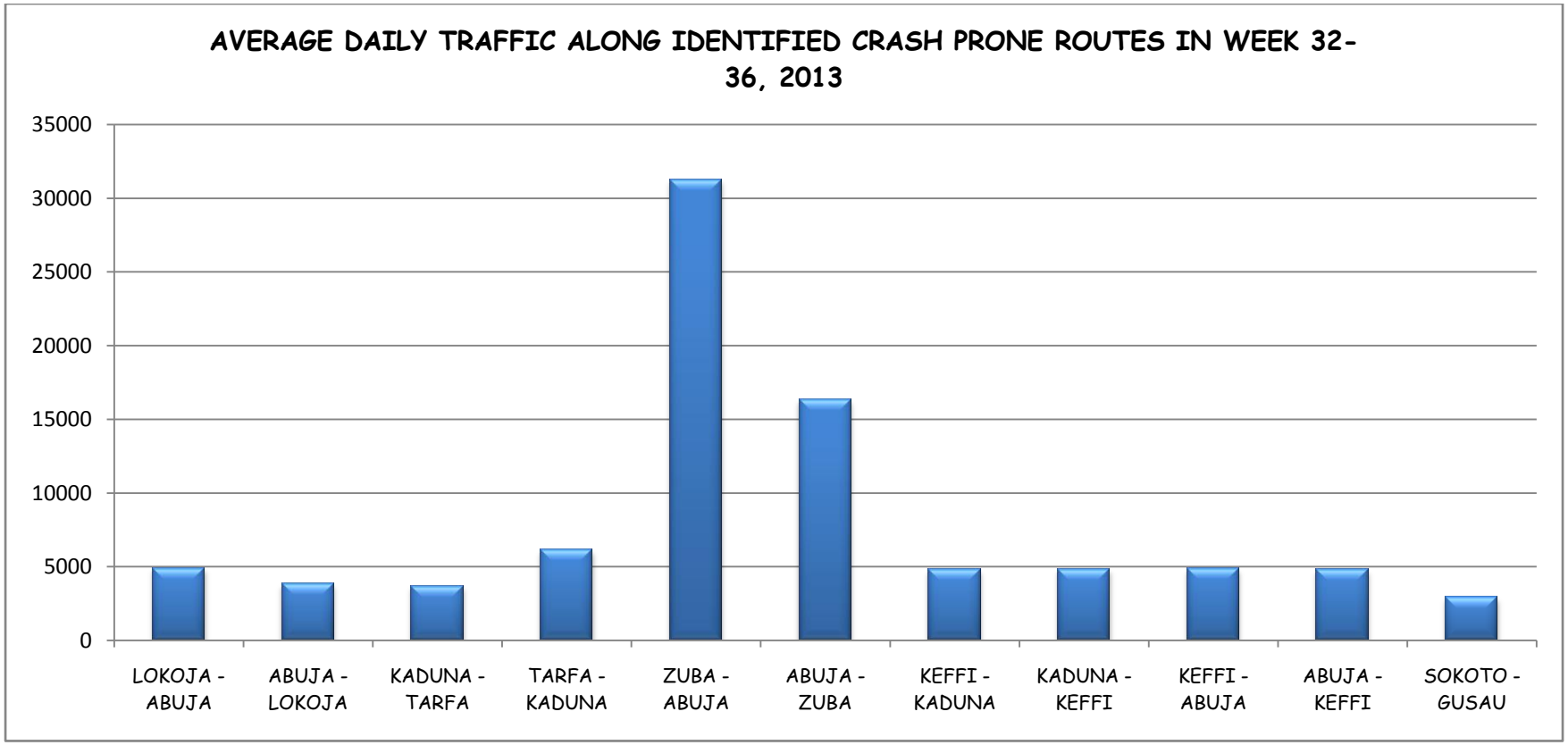
SUMMARY OF ROAD TRAFFIC COUNT CONDUCTED ALONG SELECTED IDENTIFIED CRASH-PRONE ROUTES IN WEEK 32- WEEK 36, 2013.

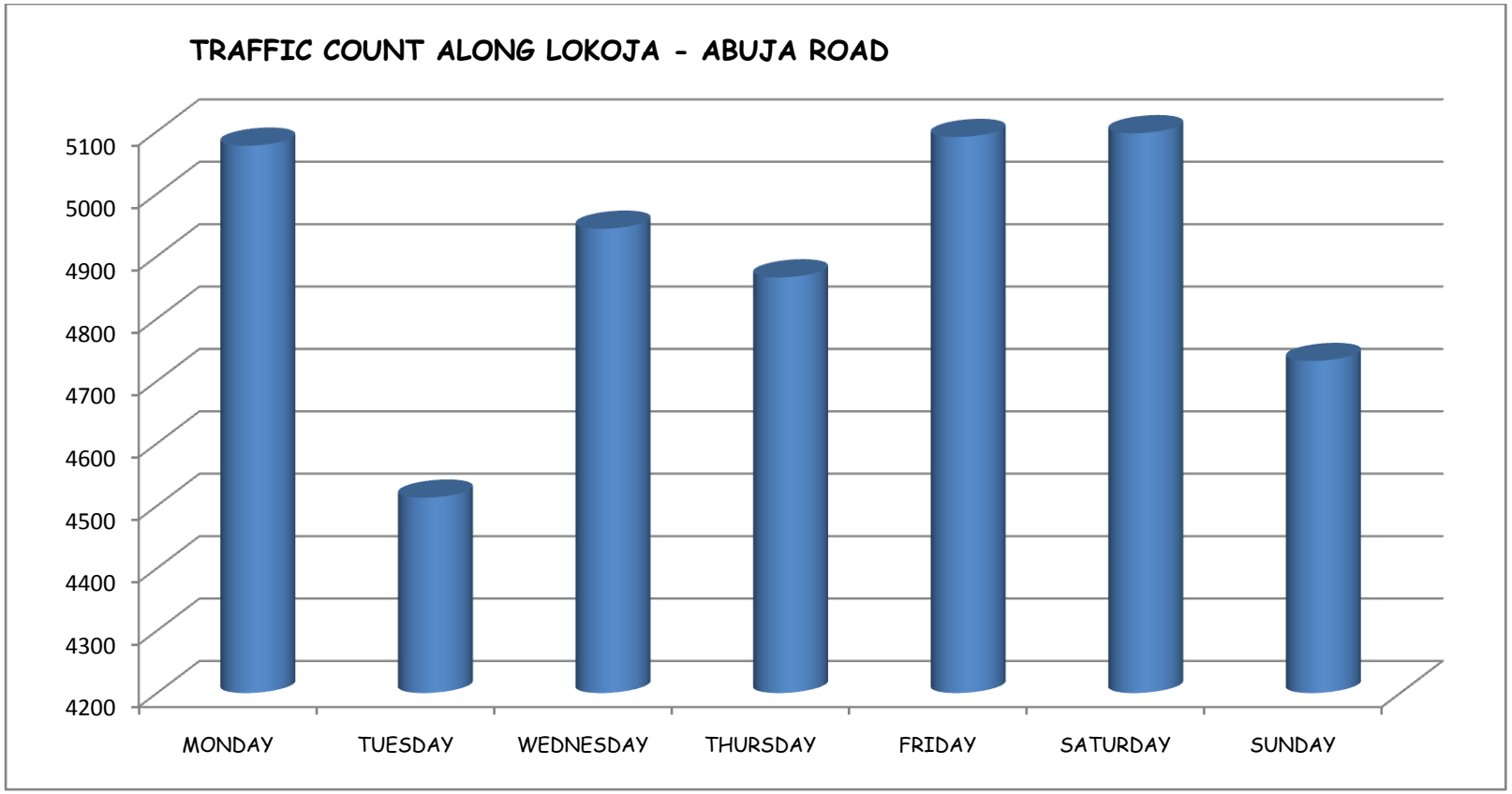
DAY OF THE WEEK	LOKOJA - ABUJA	ABUJA – LOKOJA	KADUNA - TAFA	TAFA - KADUNA	ZUBA - ABUJA	ABUJA - ZUBA	KEFFI - KADUNA	KADUNA - KEFFI	KEFFI - ABUJA	ABUJA - KEFFI	SOKOTO -GUSAU
MONDAY	5077	3661	4170	7507	40542	13570	**5674**	**5971**	**4220**	**3706**	2691
TUESDAY	4513	3886	3837	5696	36207	17437	**5354**	5137	4079	**4949**	2816
WEDNESDAY	4944	3878	5755	5962	37831	20470	**5702**	**5803**	**4987**	**4664**	2316
THURSDAY	4866	3684	4882	5020	37679	16354	**4012**	**3922**	**5854**	**5045**	3097
FRIDAY	5091	3945	3347	8340	**34195**	20052	**4610**	**4741**	**3921**	**5219**	2841
SATURDAY	5097	3859	1970	6651	**15916**	**14679**	**4295**	**3778**	**4989**	**5418**	3722
SUNDAY	4732	3939	1810	3817	**16521**	**11561**	**4108**	**4606**	**6129**	**4508**	2882
TOTAL	**34320**	26852	**25771**	**42993**	**218891**	**114123**	**33755**	**33958**	**34179**	**33509**	**20365**
AVERAGE DAILY TRAFFIC	**4903**	**3836**	**3682**	**6142**	**31270**	**16303**	**4822**	**4851**	**4883**	**4787**	**2909**

COMPARATIVE ANALYSIS OF NUMBER OF CRASHES AND AVERAGE TRAFFIC VOLUME ALONG IDENTIFIED CRASH-PRONE ROUTES BETWEEN WEEK 32-WEEK36, 2013.

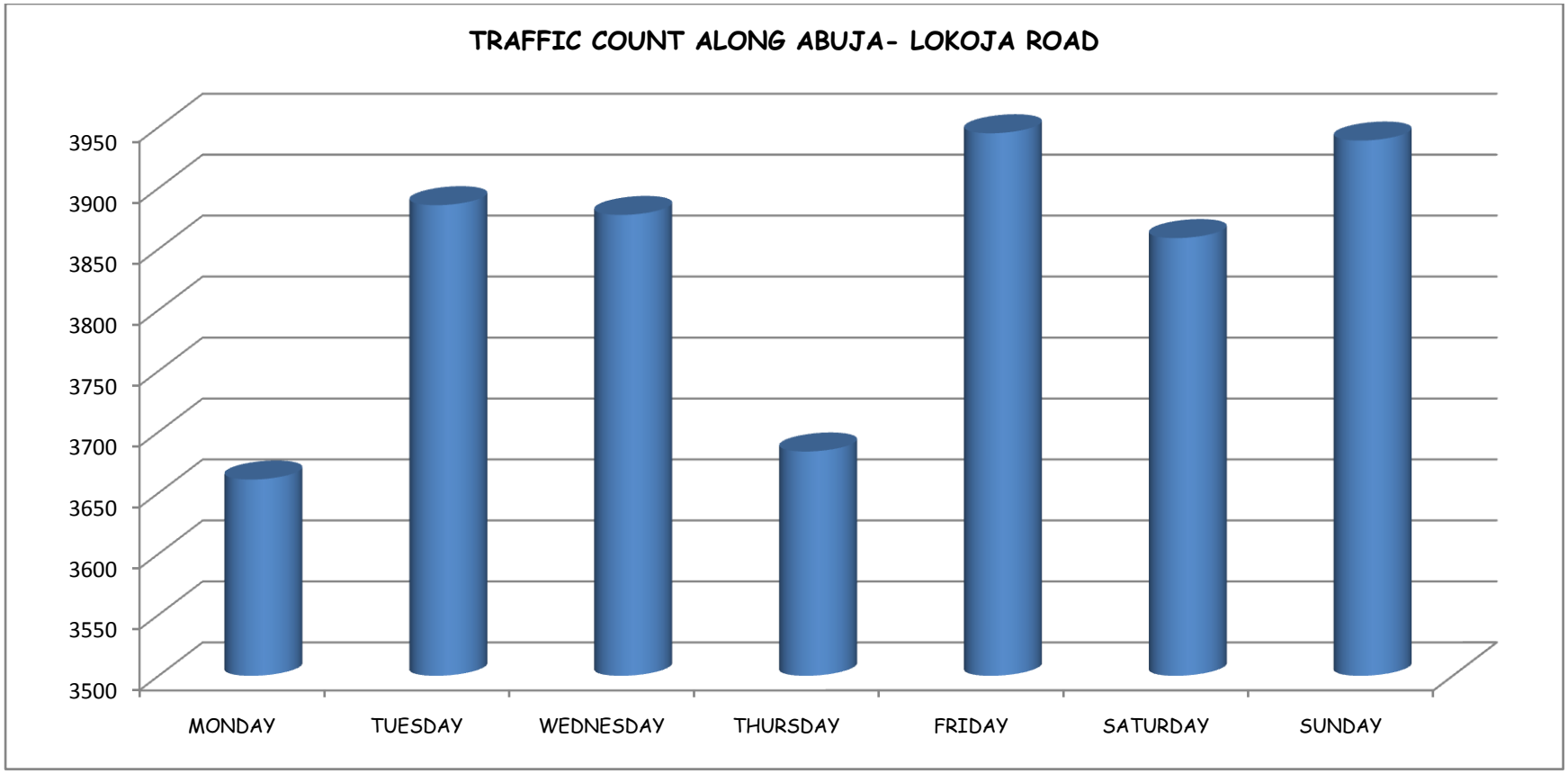
ROUTE	LOKOJA - ABUJA	KADUNA - TARFA	ZUBA - ABUJA	KEFFI - KADUNA	KEFFI - ABUJA	SOKOTO - GUSAU
AVERAGE DAILY TRAFFIC	8739	9823	47573	9673	9670	2909
NUMBER OF RTCs IN WK32-36	21	10	27	16	13	15
NUMBER OF RTCs PER 10,000 VEHICLES (RISK FACTOR)	24	10	6	17	13	52


NUMBER OF RTCs PER 10,000 VEHICLES IN IDENTIFIED CRASH-PRONE ROUTES IN WEEK32-WEEK36, 2013
60
50
40
30
20
10
0
LOKOJA - ABUJA
KADUNA - TARFA
ZUBA - ABUJA
KEFFI - KADUNA
KEFFI - ABUJA
SOKOTO - GUSAU

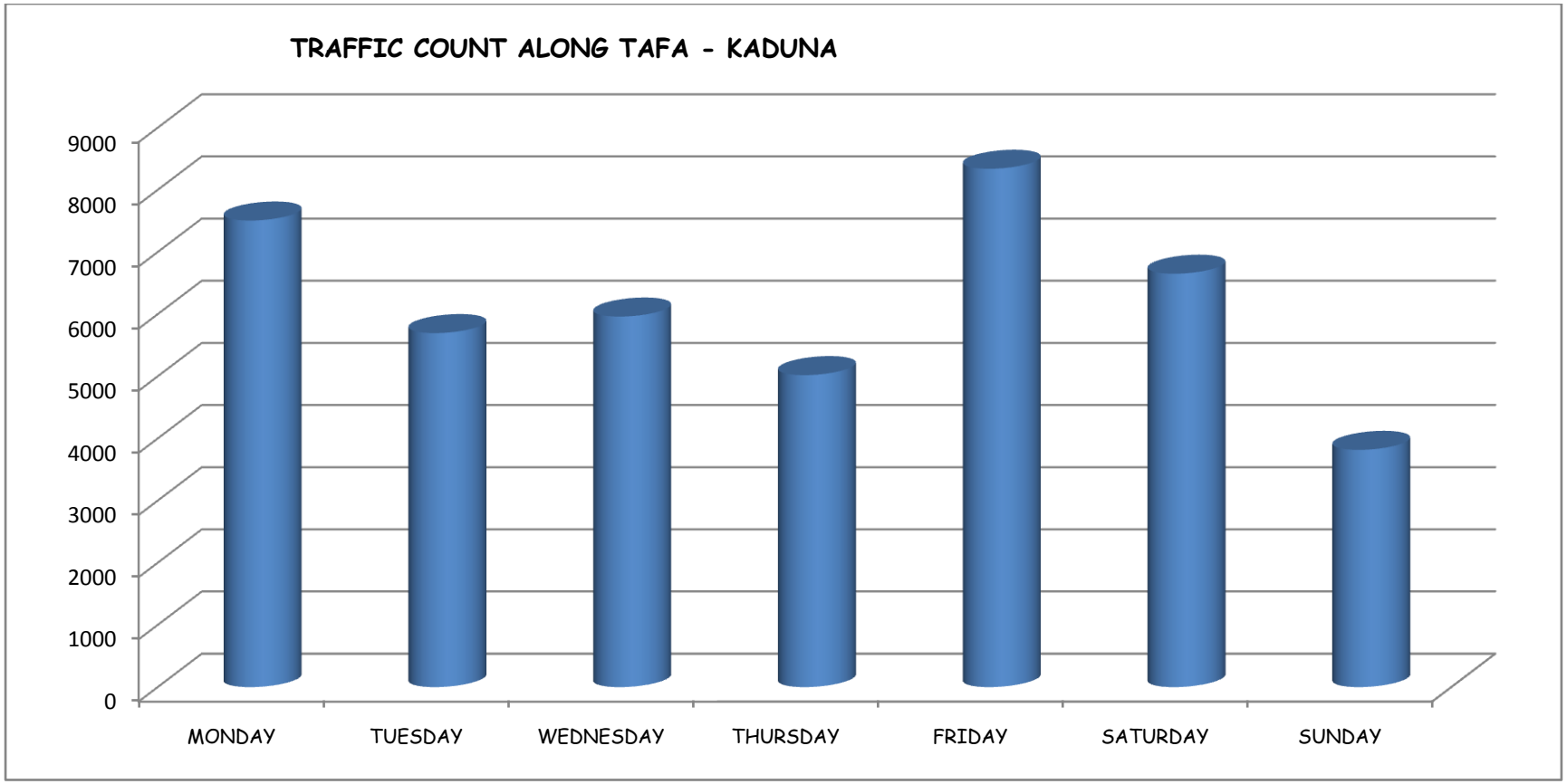

AVERAGE DAILY TRAFFIC ALONG IDENTIFIED CRASH PRONE ROUTES IN WEEK 32-36, 2013
35000
30000
25000
20000
15000
10000
5000
0
LOKOJA - ABUJA
ABUJA - LOKOJA
KADUNA - TARFA
TARFA - KADUNA
ZUBA - ABUJA
ABUJA - ZUBA
KEFFI - KADUNA
KADUNA - KEFFI
KEFFI - ABUJA
ABUJA - KEFFI
SOKOTO - GUSAU



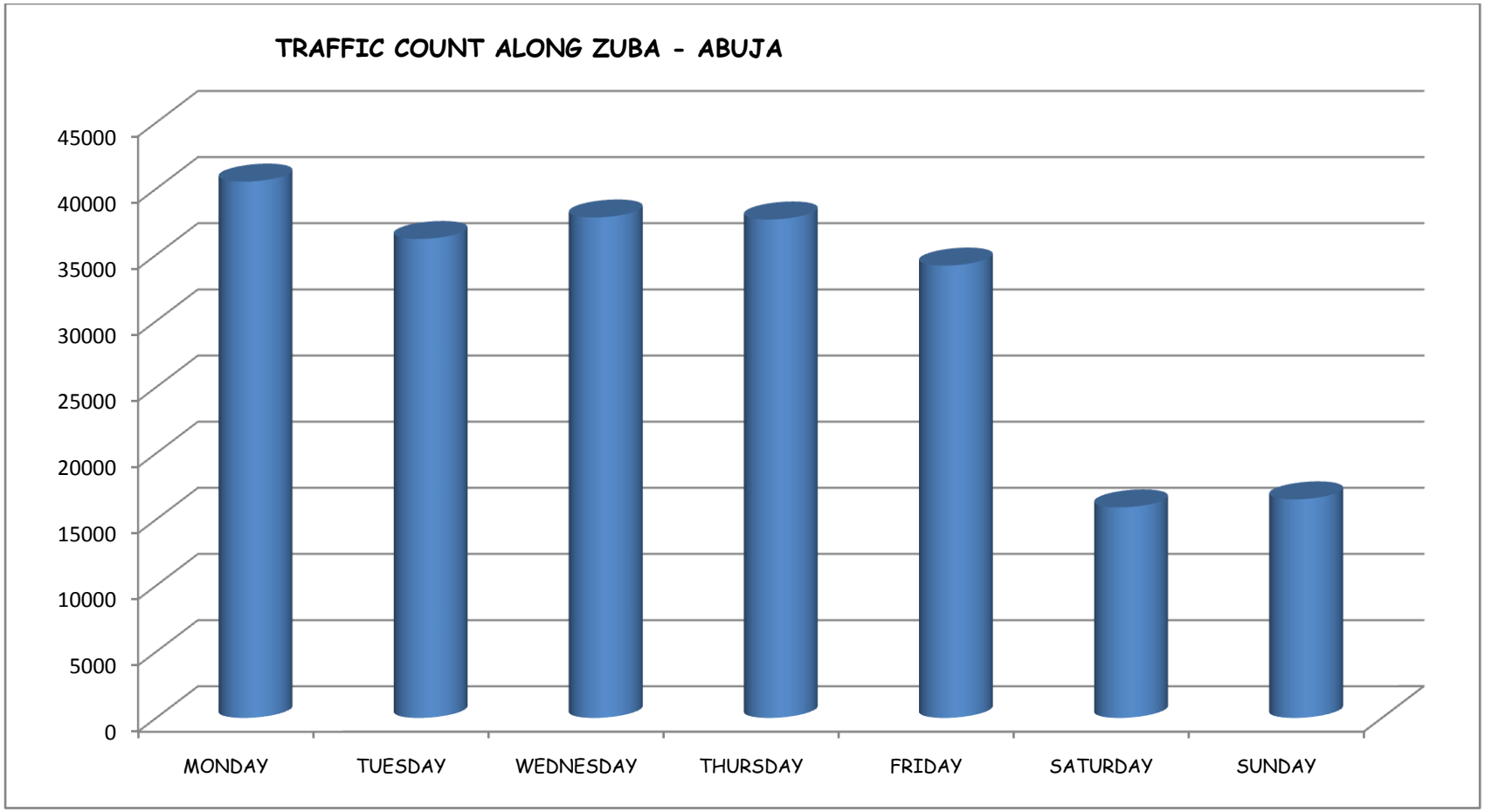
**** High traffic flow was observed to be at peak levels on Monday, Friday and Saturday with a nadir recorded on Tuesday with a value under 4,500 vehicles.**



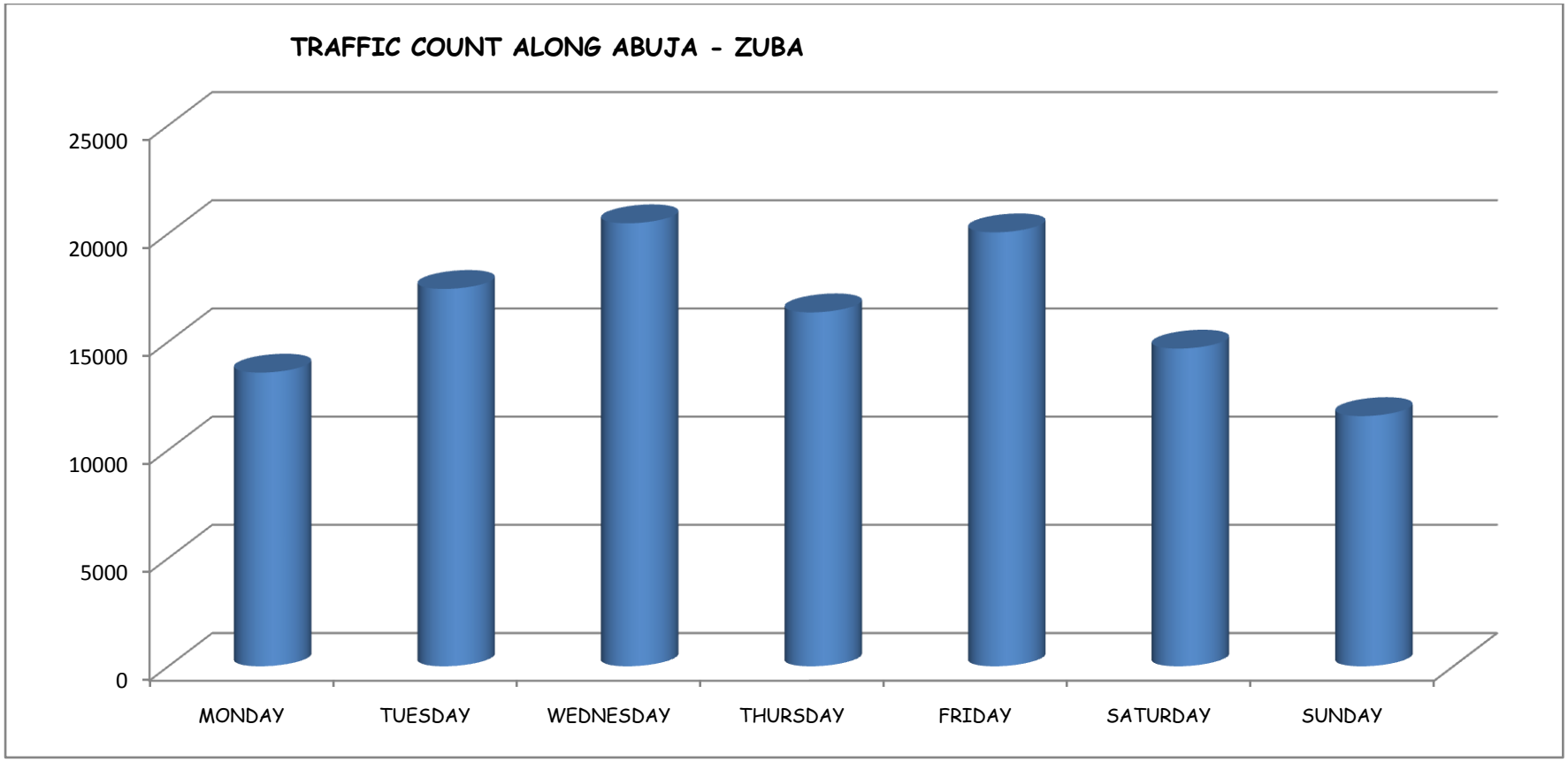
A sinu-soidal like traffic flow was observed on this route beginning low on Monday, rising a little above the Monday value on Thursday while the rest of the days of the week maintained fairly high level of traffic flow with value approximately reaching the 3,900 traffic flow.



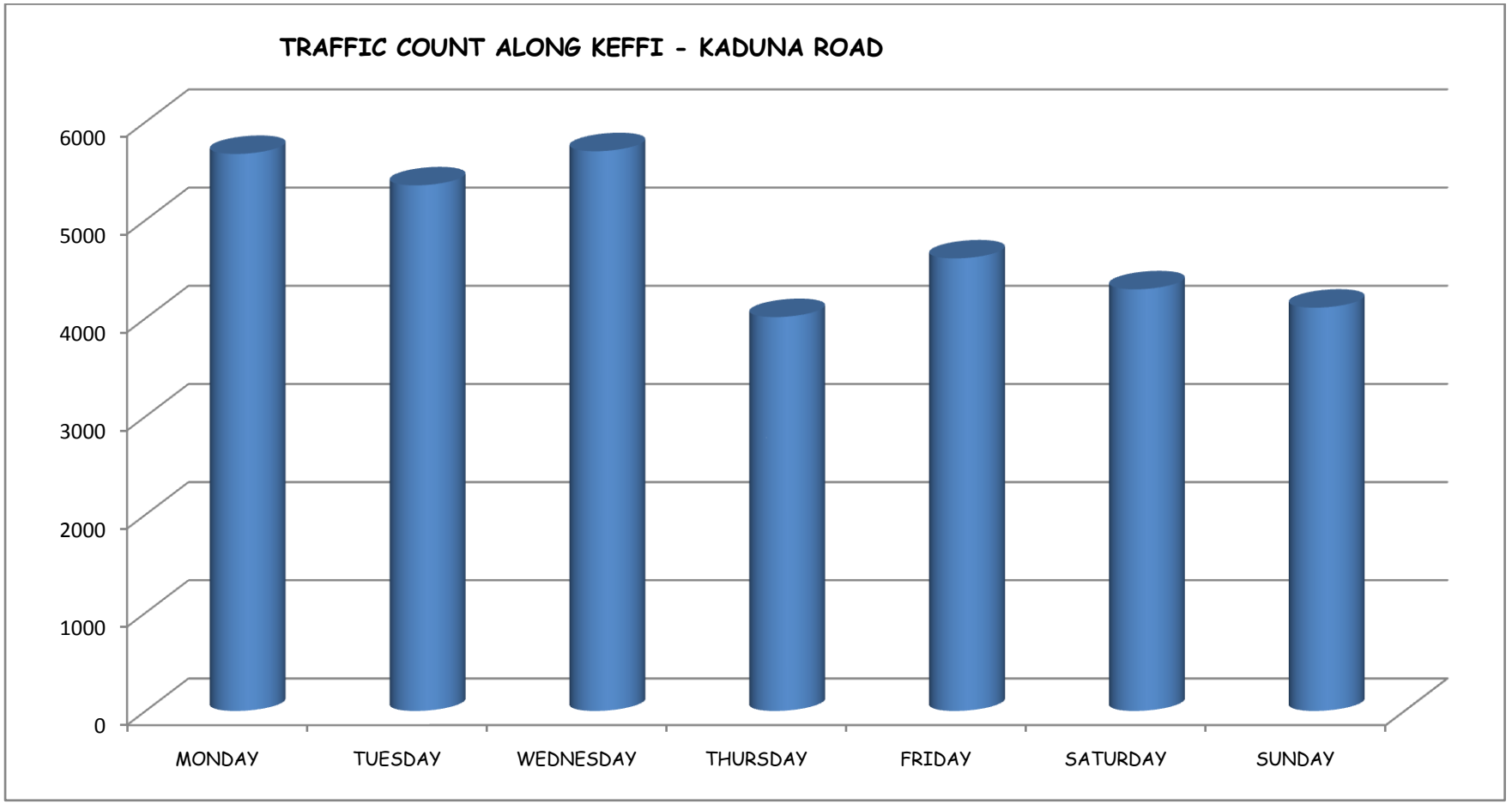
Less vehicular flow was noted for most part of the active working days of the week precisely; Tuesday, Wednesday and Thursday and the lowest traffic flow occurred on Sunday(3,817 vehicles). The peak flow of traffic was recorded on Friday(8,340 vehicles) with similar volume on Monday (7,507 vehicles). A systematic decline in traffic flow was noted in the weekend, that is from Friday to Sunday.



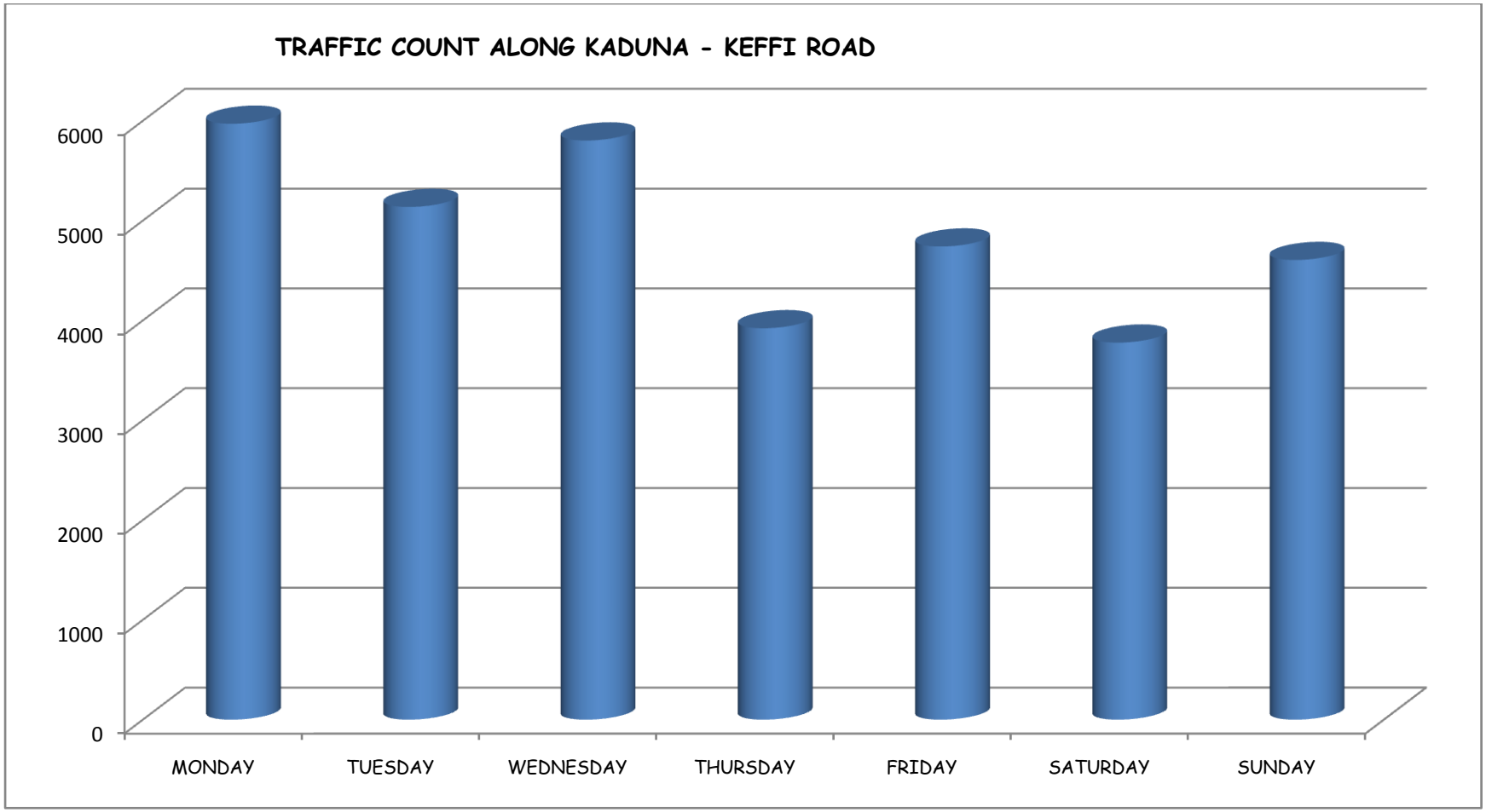
**** There is consistency in traffic flow volume along this route along the kubwa express through to the FCT city centre as expected during the working week and weekends. This is the noticeable pattern into from Zuba to Abuja from Mondays to Fridays from the morning hours (0600hrs-Noon). A similar pattern in traffic flow occurs in the post meridian hours (1600hrs-2100hrs) on the Abuja-Zuba route.**



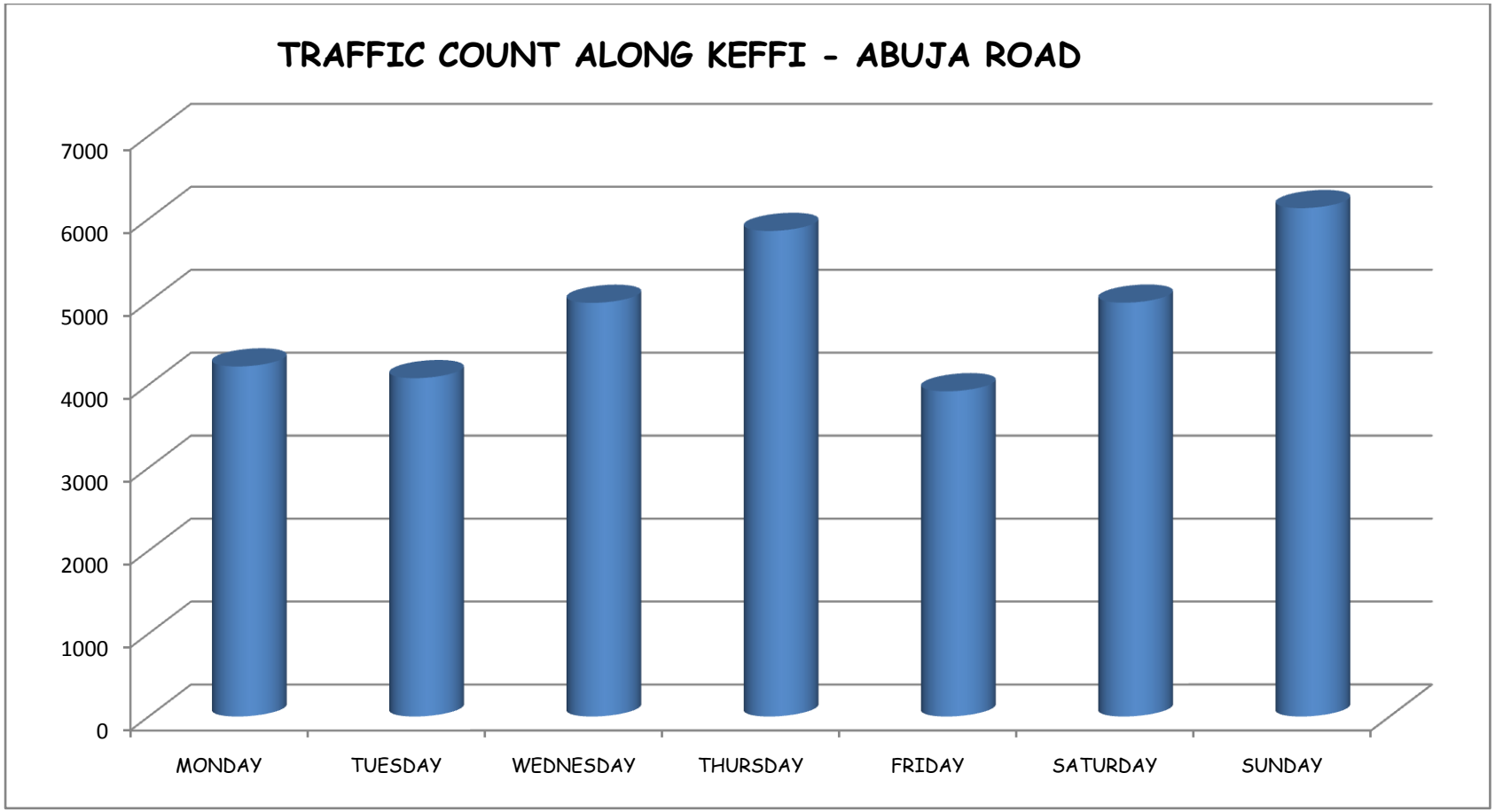
**** A steady decline in traffic flow was observed along this route in the weekend (Friday-Sunday) as envisaged. However, the working days of the week witnessed a steady rise in traffic movement with a peak value of 20,470 on that day and 20,052 on Friday. The values depicted here in this chart would have been similar to that shown on Zuba-Abuja route if the counting exercise did not terminate by 1800hrs, when movement of vehicles actually begin to rise as workers close from work to retire to the various satellite towns along this axis.**



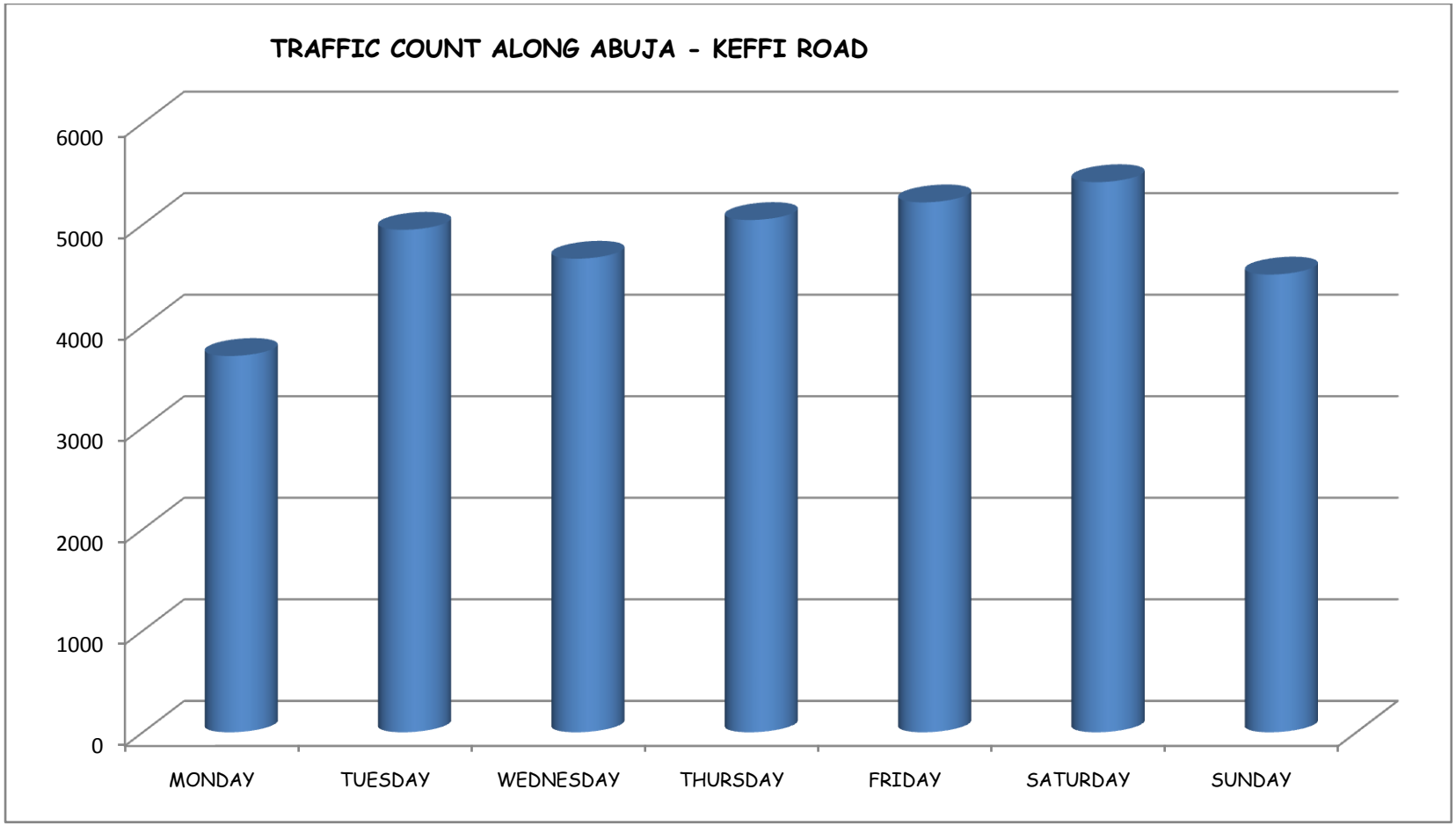
**** High volume of traffic was maintained from Monday-Wednesday with values between 5,000-6,000 vehicles and towards the weekend (Thursday-Sunday), a steady flow of traffic was observed with values ranging from 4,012 to 4,610.**



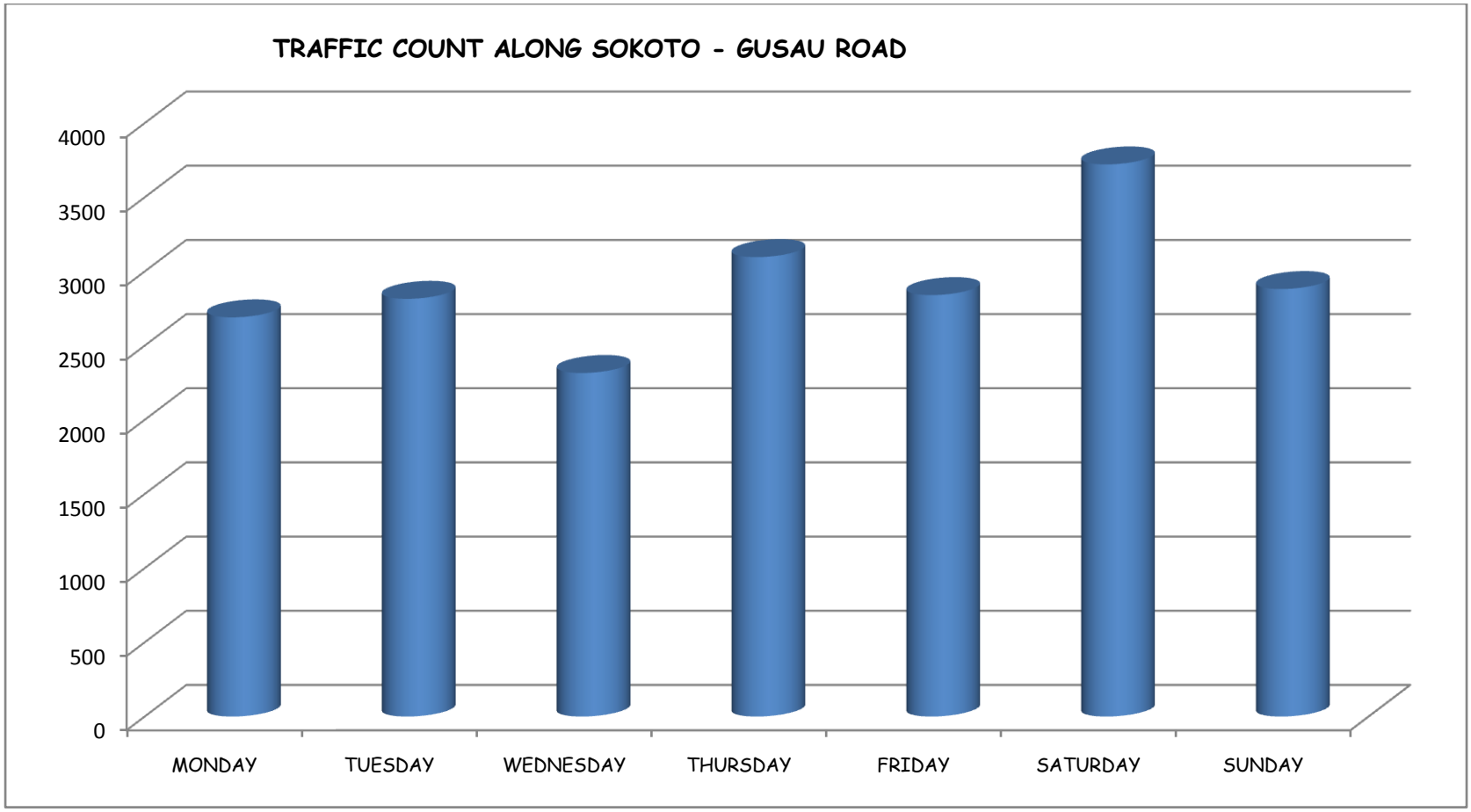
- **It was observed that relatively high traffic volume vehicular movement occurred from Monday(5,971) through Wednesday(5,803) and the rate began to decline as from Thursday and remained almost steady through to the weekend.**



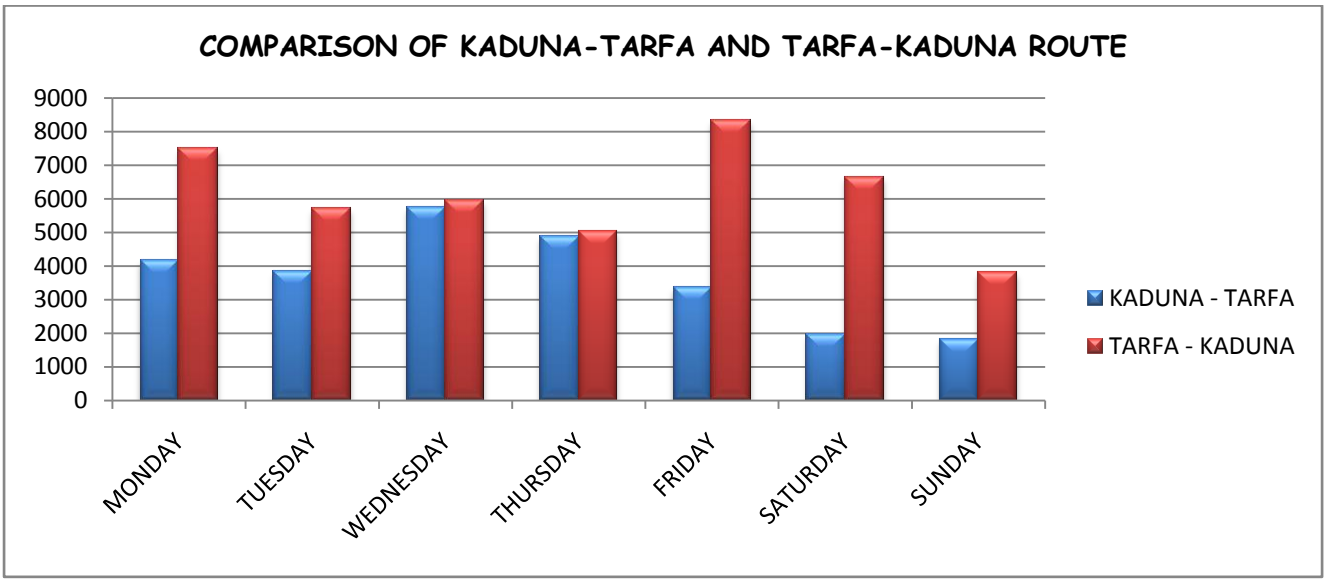
**** Two types of traffic rise patterns were observed on this route; Monday to Thursday, and Friday to Sunday. Each of these patterns indicated a steady rise with maximum traffic volumes recorded on Thursday (5,854) and Sunday (6,129).**

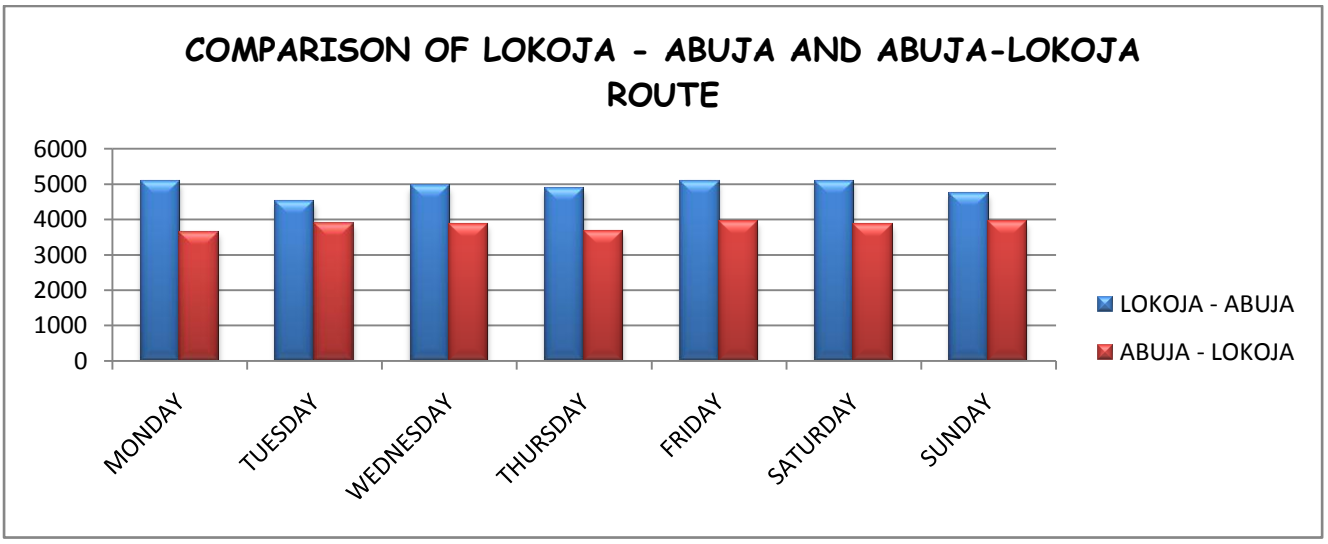


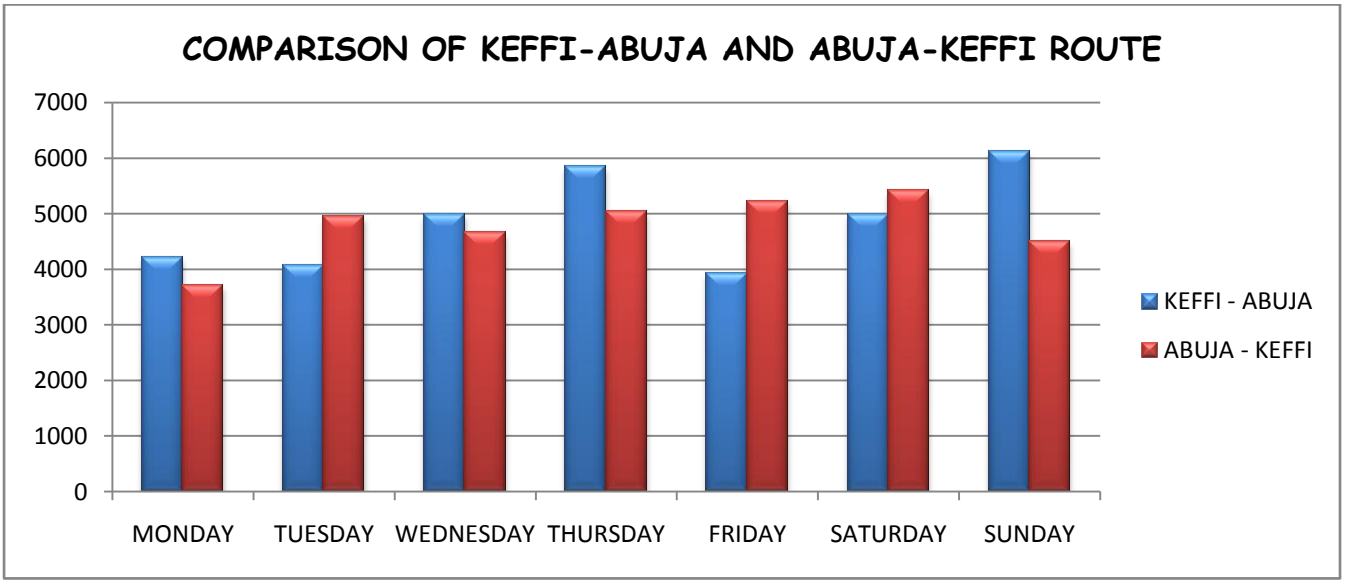
**** The entire week witnessed a steady high volume of traffic flow although with lowest value occurring on Monday (3,706). This may be informed by the fact that due to the excessive traffic congestion being witnessed, most car owners prefer to use mass transit vehicles on Mondays. However, the volume of total traffic recorded would have been higher if the exercise had not terminated by 1800hrs when real traffic actually begins to build as workers prepare to leave their offices for home.**

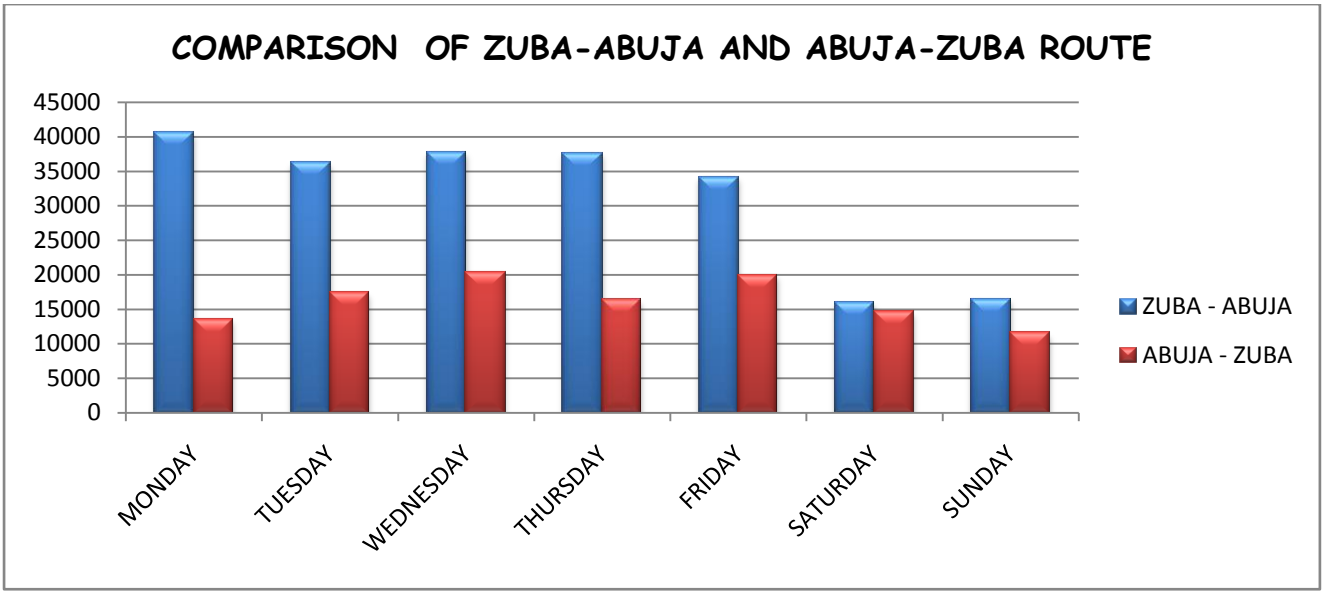


**** The highest traffic movement on this route was recorded on Saturday (3,722). A visual inspection of the chart indicates a slightly alternating traffic flow throughout the working week and weekend.**


COMPARISON OF KADUNA-TARFA AND TARFA-KADUNA ROUTE
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
KADUNA - TARFA
TARFA - KADUNA


COMPARISON OF LOKOJA - ABUJA AND ABUJA-LOKOJA ROUTE
6000
5000
4000
3000
2000
1000
0
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
LOKOJA - ABUJA
ABUJA - LOKOJA


COMPARISON OF KEFFI-ABUJA AND ABUJA-KEFFI ROUTE
7000
6000
5000
4000
3000
2000
1000
0
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
KEFFI - ABUJA
ABUJA - KEFFI


COMPARISON OF ZUBA-ABUJA AND ABUJA-ZUBA ROUTE
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
MONDAY
TUESDAY
WEDNESDAY
THURSDAY
FRIDAY
SATURDAY
SUNDAY
ZUBA - ABUJA
ABUJA - ZUBA

TRAFFIC COUNT ALONG LOKOJA - ABUJA ROAD

DAY/DATE	DAY OF THE WEEK	BICYCLE	M/BIKE	TRICYCLE	PRIV. CAR	PICK – UP	TAXI	OMNI-BUS	LUXURY BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC/ HOUR
16/09/2013	MONDAY	4	366	9	1304	450	668	693	11	538	682	352	0	5077	423
17/09/2013	TUESDAY	2	292	15	1179	418	543	626	16	459	661	302	0	4513	376
18/09/2013	WEDNESDAY	2	306	9	1325	463	706	648	7	475	665	336	2	4944	412
19/09/2013	THURSDAY	2	291	8	1304	429	705	641	10	490	632	354	0	4866	406
20/09/2013	FRIDAY	2	379	11	1373	495	657	612	14	546	658	343	1	5091	424
21/09/2013	SATURDAY	2	278	12	1347	432	685	648	11	486	663	359	0	5097	425
22/09/2013	SUNDAY	0	195	6	1359	462	710	616	6	436	567	373	2	4732	394
TOTAL		**14**	**2107**	**70**	**9191**	**3149**	**4674**	**4484**	**75**	**3430**	**4528**	**2419**	**5**	**34320**	**2860**
AVERAGE DAILY TRAFFIC		**2**	**301**	**10**	**1313**	**450**	**668**	**641**	**11**	**490**	**647**	**346**	**1**	**4903**	**409**

TRAFFIC COUNT ALONG ABUJA - LOKOJA ROAD

DAY/DATE	DAY OF THE WEEK	BICYCLE	M/BIKE	TRICYCLE	PRIV. CAR	PICK – UP	TAXI	OMNI-BUS	LUXURY BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC/ HOUR
16/09/2013	MONDAY	2	244	39	1282	65	682	575	8	131	441	190	2	3661	305
17/09/2013	TUESDAY	10	273	48	1267	58	771	589	7	192	456	213	2	3886	324
18/09/2013	WEDNESDAY	2	280	37	1218	71	806	605	10	182	479	188	0	3878	323
19/09/2013	THURSDAY	0	233	39	1268	62	769	539	7	152	439	176	0	3684	307
20/09/2013	FRIDAY	0	276	60	1271	78	813	599	11	151	469	217	0	3945	329
21/09/2013	SATURDAY	4	232	58	1286	148	765	544	9	177	431	204	1	3859	322
22/09/2013	SUNDAY	2	287	24	1224	75	816	595	11	180	509	216	0	3939	328
TOTAL		20	1825	305	8816	557	5422	4046	63	1165	3224	1404	5	26852	2238
AVERAGE DAILY TRAFFIC		3	261	44	1259	80	775	578	9	166	461	201	1	3836	320

TRAFFIC COUNT ALONG KADUNA - TARFA

DATE	DAY OF THE WEEK	BICYCLE	MOTOR BIKE	TRI CYCLE	PRIVATE CAR	PICK UP	TAXI	OMNI BUS	LUXUR Y BUS	LORRY/T RUCK	TANKER	TRAILE R	OTHERS	TOTAL	TRAFFIC /HOUR
16/09/2013	MONDAY	2	564	2	1488	36	36	1224	288	72	168	96	194	4170	348
17/09/2013	TUESDAY	3	492	6	1728	244	276	456	20	180	240	72	120	3837	320
18/09/2013	WEDNESDAY	2	946	3	3348	120	228	672	26	86	72	192	60	5755	480
19/09/2013	THURSDAY	3	464	2	2411	146	168	1211	11	66	112	132	156	4882	407
20/09/2013	FRIDAY	2	320	0	1646	42	321	630	22	48	89	111	116	3347	279
21/09/2013	SATURDAY	2	324	1	664	28	26	488	20	118	86	121	92	1970	164
22/09/2013	SUNDAY	2	521	0	488	32	390	0	26	66	68	125	92	1810	151
TOTAL		**16**	**3631**	**14**	**11773**	**648**	**1445**	**4681**	**413**	**636**	**835**	**849**	**830**	**25771**	**2148**
AVERAGE DAILY TRAFFIC		**2**	**519**	**2**	**1682**	**93**	**206**	**669**	**59**	**91**	**119**	**121**	**119**	**3682**	**307**

TRAFFIC COUNT ALONG TARFA KADUNA

DATE	DAY OF THE WEEK	BICYCLE	MOTOR BIKE	TRICYCLE	PRIVATE CAR	PICK UP	TAXI	OMNI BUS	LUXURY BUS	LORRY/ TRUCK	TANKER	TRAILER	OTHERS	TOTAL	TRAFFIC VOLUME/ HOUR
16/09/2013	MONDAY	4	744	4	1560	156	264	1380	24	2879	168	144	180	7507	626
17/09/2013	TUESDAY	2	240	2	3240	168	144	1164	26	240	149	159	162	5696	475
18/09/2013	WEDNESDAY	2	720	2	2076	252	399	1701	18	126	120	399	147	5962	497
19/09/2013	THURSDAY	4	600	4	2520	120	240	1008	24	42	96	98	264	5020	418
20/09/2013	FRIDAY	4	1506	2	2604	420	1632	1224	36	312	108	228	264	8340	695
21/09/2013	SATURDAY	3	1421	2	1807	384	1422	1186	28	101	62	76	159	6651	554
22/09/2013	SUNDAY	2	1112	2	1058	56	428	920	22	38	46	78	55	3817	318
TOTAL		**21**	**6343**	**18**	**14865**	**1556**	**4529**	**8583**	**178**	**3738**	**749**	**1182**	**1231**	**42993**	**3583**
AVERAGE DAILY TRAFFIC		**3**	**906**	**3**	**2124**	**222**	**647**	**1226**	**25**	**534**	**107**	**169**	**176**	**6142**	**512**

TRAFFIC COUNT ALONG ZUBA - ABUJA

DATE	DAY OF THE WEEK	BICYCLE	M/CYCLE	TRICYCLE	P/CAR	TAXI	PICK/ UP	MINI BUS	LUX. BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC VOLUME /HOUR
16/09/2013	MONDAY	0	1960	305	22185	3870	1852	5595	2150	2170	260	195		40542	3379
17/09/2013	TUESDAY	0	736	83	24540	2953	2003	3345	984	1121	145	297		36207	3017
18/09/2013	WEDNESDAY	0	444	354	26560	2357	785	4735	918	757	508	413		37831	3153
19/09/2013	THURSDAY	0	1212	101	26616	2186	1820	3163	839	951	220	571		37679	3140
20/09/2013	FRIDAY	**5**	**1495**	**30**	**26380**	**1710**	**1057**	**1088**	**970**	**970**	**263**	**227**		**34195**	2850
21/09/2013	SATURDAY	**0**	**420**	**106**	**9110**	**2205**	**610**	**1758**	**269**	**1000**	**251**	**187**		**15916**	1326
22/09/2013	SUNDAY	**0**	**1265**	**646**	**10270**	**568**	**376**	**1601**	**652**	**580**	**196**	**367**		**16521**	1377
TOTAL		**5**	**7532**	**1625**	**145661**	**15849**	**8503**	**21285**	**6782**	**7549**	**1843**	**2257**		**218891**	**18241**
AVERAGE DAILY TRAFFIC		**1**	**1076**	**232**	**20809**	**2264**	**1215**	**3041**	**969**	**1078**	**263**	**322**	**0**	**31270**	**2606**

TRAFFIC COUNT ALONG ABUJA – ZUBA

DATE	DAY OF THE WEEK	BICYCLE	M/CYCLE	TRICYCLE	P/CAR	TAXI	PICK/ UP	MINI BUS	LUX/ BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHER	TOTAL	TRAFFIC VOLUME/ HOUR
23/09/2013	MONDAY	1	1240	114	5670	2080	690	2191	500	714	237	134	0	13570	1131
24/09/2013	TUESDAY	13	710	71	8610	2760	1277	2109	439	851	387	210		17437	1453
25/09/2013	WEDNESDAY	3	645	102	12316	2255	1479	1800	561	1036	185	88		20470	1706
26/09/2013	THURSDAY	7	610	95	8630	1955	1116	1907	500	1201	211	122	0	16354	1363
27/09/2013	FRIDAY		176	22	9958	2543	1875	2615	416	1319	988	140		20052	1671
28/09/2013	SATURDAY	**8**	**593**	**113**	**8100**	**1591**	**998**	**1791**	**208**	**988**	**201**	**88**		**14679**	1223
29/09/2013	SUNDAY	**12**	**119**	**7**	**7295**	**941**	**1024**	**1402**	**193**	**284**	**137**	**147**		**11561**	963
TOTAL		**44**	**4093**	**524**	**60579**	**14125**	**8459**	**13815**	**2817**	**6393**	**2346**	**929**	**0**	**114123**	**9510**
AVERAGE DAILY TRAFFIC		**6**	**585**	**75**	**8654**	**2018**	**1208**	**1974**	**402**	**913**	**335**	**133**	**0**	**16303**	**1359**

TRAFFIC COUNT ALONG KEFFI - KADUNA ROAD

DATE	DAY OF THE WEEK	BICYCLE	M/CYCLE	TRICYCLE	P/ CAR	TAXI	PICK UP	MINI BUS	LUX/ BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC VOLUME/ HOUR
23/09/2013	MONDAY	3	**1141**	**37**	**1334**	**625**	**156**	**1198**	**3**	**255**	**121**	**128**	**673**	**5674**	473
24/09/2013	TUESDAY		**1570**		**1230**	**772**	**2255**	**889**	**10**	**144**	**28**	**34**	**420**	**5354**	446
25/09/2013	WEDNESDAY	7	**1101**	**3**	**1429**	**749**	**184**	**1119**	**9**	**331**	**123**	**123**	**524**	**5702**	475
26/09/2013	THURSDAY	8	**866**		**808**	**495**	**179**	**512**	**8**	**384**	**124**	**96**	**531**	**4012**	334
27/09/2013	FRIDAY		**988**		**1170**	**947**	**164**	**759**	**7**	**297**	**108**	**79**	**491**	**4610**	384
28/09/2013	SATURDAY		**1051**		**1165**	**576**	**158**	**722**	**6**	**184**	**56**	**49**	**328**	**4295**	358
29/09/2013	SUNDAY		**778**		**1085**	**531**	**98**	**726**	**6**	**265**	**92**	**80**	**447**	**4108**	342
TOTAL		**18**	**7495**	**40**	**8221**	**4695**	**3194**	**5925**	**49**	**1860**	**652**	**589**	**3414**	**33755**	2813
AVERAGE DAILY TRAFFIC		**3**	**1071**	**6**	**1174**	**671**	**456**	**846**	**7**	**266**	**93**	**84**	**488**	**4822**	**402**

TRAFFIC COUNT ALONG KADUNA KEFFI ROAD

DATE	DAY OF THE WEEK	BICYCLE	M/CYCLE	TRICYCLE	P/ CAR	TAXI	PICK UP	MINI BUS	LUX. BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC VOLUME/ HOUR
23/09/2013	MONDAY		1256	90	1416	796	153	1135	8	200	119	144	654	5971	498
24/09/2013	TUESDAY		1006		1128	884	212	897	6	305	59	57	583	5137	428
25/09/2013	WEDNESDAY	4	1176		1450	648	118	1225	3	279	143	129	637	5803	484
26/09/2013	THURSDAY	3	797		798	475	294	619	10	221	129	59	667	3922	327
27/09/2013	FRIDAY		1057		1255	468	182	775	8	286	80	91	539	4741	395
28/09/2013	SATURDAY	4	682	8	843	410	175	651	5	240	113	67	580	3778	315
29/09/2013	SUNDAY		811		1262	595	165	854	7	288	105	109	410	4606	384
TOTAL		11	6785	98	8152	4276	1299	6156	47	1819	748	656	4070	33958	2830
AVERAGE DAILY TRAFFIC		2	969	14	1165	611	186	879	7	260	107	94	581	4851	404

TRAFFIC COUNT ALONG KEFFI - ABUJA ROAD

DATE	DAY OF THE WEEK	BICYCLE	M/CYCLE	TRICYCLE	P/ CAR	TAXI	PICK UP	MINI BUS	LUX. BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC VOLUME/ HOUR
23/09/2013	MONDAY	3	851	16	1025	566	124	658	5	275	106	92	499	4220	352
24/09/2013	TUESDAY		712	45	855	545	234	741	7	214	58	109	559	4079	340
25/09/2013	WEDNESDAY		1008		1228	613	125	1043	6	305	92	68	499	4987	416
26/09/2013	THURSDAY		1178		1804	744	202	1069	5	220	116	53	453	5854	488
27/09/2013	FRIDAY		787		1015	381	202	602	8	322	113	100	391	3921	327
28/09/2013	SATURDAY		995		1293	493	269	898	10	437	103	111	380	4989	416
29/09/2013	SUNDAY		1117		1815	745	143	987	11	349	108	140	714	6129	511
TOTAL		3	6648	61	9035	4087	1299	5998	52	2122	696	673	3495	34179	2848
AVERAGE DAILY TRAFFIC		0	950	9	1291	584	186	857	7	303	99	96	499	4883	407

TRAFFIC COUNT ALONG ABUJA - KEFFI ROAD

DATE	DAY OF THE WEEK	BICYCLE	M/CYCLE	TRICYCLE	P/ CAR	TAXI	PICK UP	MINI BUS	LUX. BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC VOLUME/ HOUR
23/09/2013	MONDAY		757	10	854	445	93	624	5	202	81	93	542	3706	309
24/09/2013	TUESDAY	6	968	3	1135	568	100	915	6	355	298	155	440	4949	412
25/09/2013	WEDNESDAY		858		1074	635	164	904	4	251	103	93	578	4664	389
26/09/2013	THURSDAY		1033		1126	686	147	985	8	290	98	75	597	5045	420
27/09/2013	FRIDAY		1279	5	1309	453	157	792	6	339	142	176	561	5219	435
28/09/2013	SATURDAY	4	1134	15	1286	494	201	1061	8	296	162	140	617	5418	452
29/09/2013	SUNDAY		784		1006	608	121	800	10	243	118	85	713	4508	376
TOTAL		10	6813	33	7790	3889	983	6081	47	1976	1002	817	4048	33509	2792
AVERAGE DAILY TRAFFIC		1	973	5	1113	556	140	869	7	282	143	117	578	4787	399

TRAFFIC COUNT ALONG SOKOTO - GUSAU ROAD

DATE	DAY OF THE WEEK	BICYCLE	M/CYCLE	TRICYCLE	P/ CAR	TAXI	PICK UP	MINI BUS	LUX. BUS	LORRY/ TRUCK	TRAILER	TANKER	OTHERS	TOTAL	TRAFFIC VOLUME/ HOUR
23/09/2013	MONDAY	210	569	13	602	404	201	305	3	152	232		0	2691	269.1* (10hrs)
24/09/2013	TUESDAY	74	893	23	475	210	215	380	5	336	205		0	2816	281.6** (11hrs)
25/09/2013	WEDNESDAY	32	586	17	564	145	188	394	5	76	309			2316	211
26/09/2013	THURSDAY	12	672	26	727	410	408	483	7	68	284			3097	258
27/09/2013	FRIDAY		1002	79	572	306		277	5	213	333		54	2841	237
28/09/2013	SATURDAY	54	477	40	1490	371	299	369	8	277	268		69	3722	310
29/09/2013	SUNDAY	7	1102	79	522	306		277	5	213	333		38	2882	240
TOTAL		**389**	**5301**	**277**	**4952**	**2152**	**1311**	**2485**	**38**	**1335**	**1964**		**161**	**20365**	**1697**
AVERAGE DAILY TRAFFIC		**56**	**757**	**40**	**707**	**307**	**187**	**355**	**5**	**191**	**281**	**0**	**23**	**2909**	**242**

OBSERVATIONS

i. The traffic count was conducted for a period of 12hours,that is from 0600hrs-1800hrs which means not all the traffic flow was captured for the period of the exercise.
ii. The traffic counts was conducted manually, which is prone to some level of errors ranging from loss of count, tiredness on the part of observers, and some other factors. For example, Lokoja-Abuja route recorded far below
iii. Expected traffic volume as compared with other routes in this exercise.

RECOMMENDATIONS

i. Subsequent traffic count on identified crash prone routes be conducted using electronic counter device donated to the Corps by RSDT.
ii. Thorough Road Audit should be conducted on identified routes that have high Risk Factors with a view to ascertain other possible causative factors contributing to RTC on those routes.

CONCLUSION

From the analysis carried out on recorded highest Daily Average Traffic (DAT) and also the highest Road Traffic Crash (RTC) occurrence for week 32-36 in view, it implies that traffic volume is relative to RTC occurrence.

Invariably, when the routes are placed on the same platform of per 10,000 vehicle population, it was discovered that the routes with low traffic volume (Sokoto-Gusau and Lokoja-Abuja) have high risk factors. This therefore, suggests that RTC occurrence is not only dependent on traffic volume, rather, there are other risk factors associated with RTC which should be investigated for possible remedies.

Source: Federal Road Safety Corps (2013) – 'Executive summary of road traffic crash and traffic count conducted along crash prone routes from week 32-36, 2013 -An Unpublished Report of the Policy, Research and statistics Department of the Federal Road safety Corps, Abuja, Nigeria.

ANALYSIS OF TREND OF ROAD TRAFFIC CRASHES AND SPECIAL INTERVENTION PATROLS, 2013

The appraisal of FRSC intervention patrols and road traffic crashes in 2013 took into consideration a total of nine (9) Special Patrols which were conducted in the year 2013. The Special Operations studied are:

*Operation Zero 2012
*Easter patrol
*Operation Shield I
*Operation Shield II
*Operation Rainstorm
*Eid-Il Fitri (Salah)
*Operation Shield III
*Eid-Il-Kabir (Salah)
*Operation Octopus, were appraised

METHODOLOGY:

RTC data collated three weeks before the intervention, during the intervention and three (3) weeks after the intervention were analysed. The trend of the Daily Average RTC pattern formed the basis for this appraisal.

ANALYSIS OF TREND OF ROAD TRAFFIC CRASHES AND SPECIAL INTERVENTION PATROLS, 2013

TABLE 1: ABSOLUTE RTC DURING SPECIAL INTERVENTION PATROLS

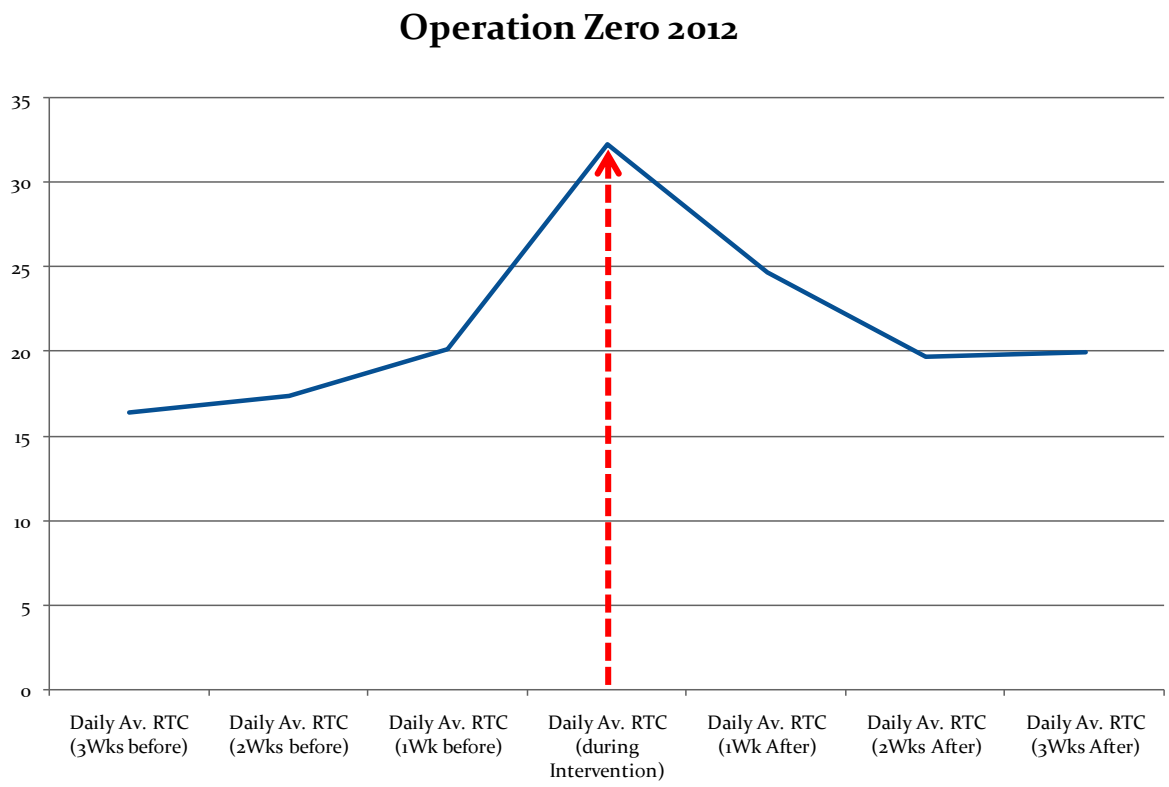
S/N	Intervention	Duration	Period	3Wks before	2Wks before	1Wk before	intervention Week(s)	1Wk after	2Wks after	3Wks after
1	Operation Zero 2012	26 days	19 Dec 12-13 Jan 13	115	122	141	840	173	138	140
2	Easter patrol	5 days	29 Mar-2 Apr 13	153	121	174	164	135	112	119
3	Operation Shield I	7 days	5-13 May 13	112	119	131	146	136	126	124
4	Operation Shield II	7 days	27 May-2 Jun 13	146	136	126	124	100	139	157
5	Operation Rainstorm	7 days	9-16 Jun 13	126	124	100	139	157	118	132
6	Eid-Il Fitri (Salah)	5 days	6-11 Aug 13	134	167	140	162	156	106	102
7	Operation Shield III	7 days	18-25 Aug 13	140	162	156	106	102	119	126
8	Eid-Il-Kabir (Salah)	5 days	14-18 Oct 13	176	166	176	254	204	139	219
9	Operation Octopus	15 days	1-15 Nov 13	254	204	139	467	217	244	232

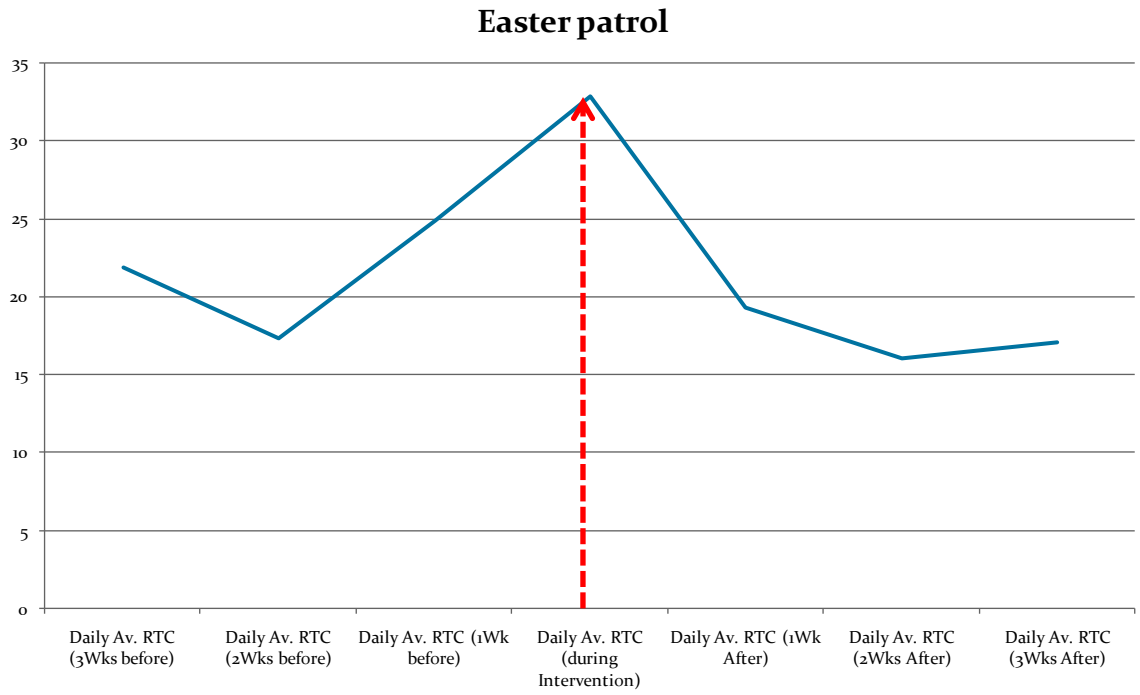
Red highlighted background indicates Special Intervention Patrols during Festive Periods

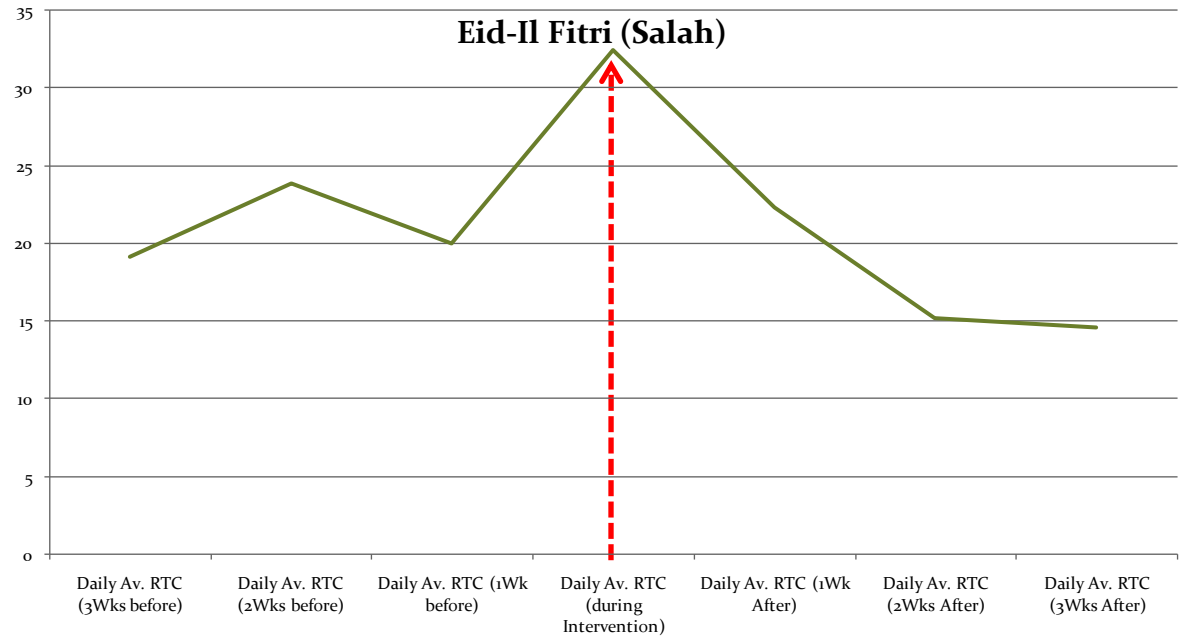
TABLE 2: DAILY AVERAGE RTC DURING SPECIAL INTERVENTION PATROLS

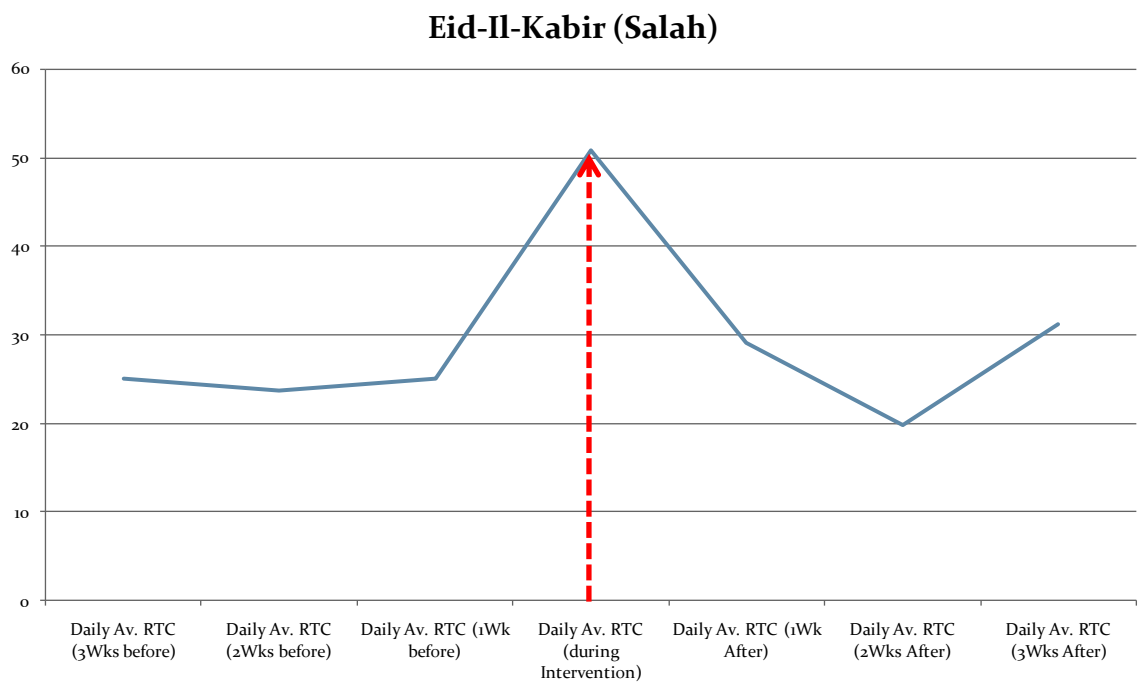
S/N	Intervention	Duration	Period	Daily Av. RTC (3Wks before)	Daily Av. RTC (2Wks before)	Daily Av. RTC (1Wk before)	Daily Av. RTC (during Intervention)	Daily Av. RTC (1Wk After)	Daily Av. RTC (2Wks After)	Daily Av. RTC (3Wks After)
1	Operation Zero 2012	26 days	19 Dec 12-13 Jan 13	16	17	20	32	25	20	20
2	Easter patrol	5 days	29 Mar-2 Apr 13	22	17	25	33	19	16	17
3	Operation Shield I	7 days	5-13 May 13	16	17	19	21	19	18	18
4	Operation Shield II	7 days	27 May-2 Jun 13	21	19	18	18	14	20	22
5	Operation Rainstorm	7 days	9-16 Jun 13	18	18	14	20	22	17	19
6	Eid-Il Fitri (Salah)	5 days	6-11 Aug 13	19	24	20	32	22	15	15
7	Operation Shield III	7 days	18-25 Aug 13	20	23	22	15	15	17	18
8	Eid-Il-Kabir (Salah)	5 days	14-18 Oct 13	25	24	25	51	29	20	31
9	Operation Octopus	15 days	1-15 Nov 13	36	29	20	31	31	35	33

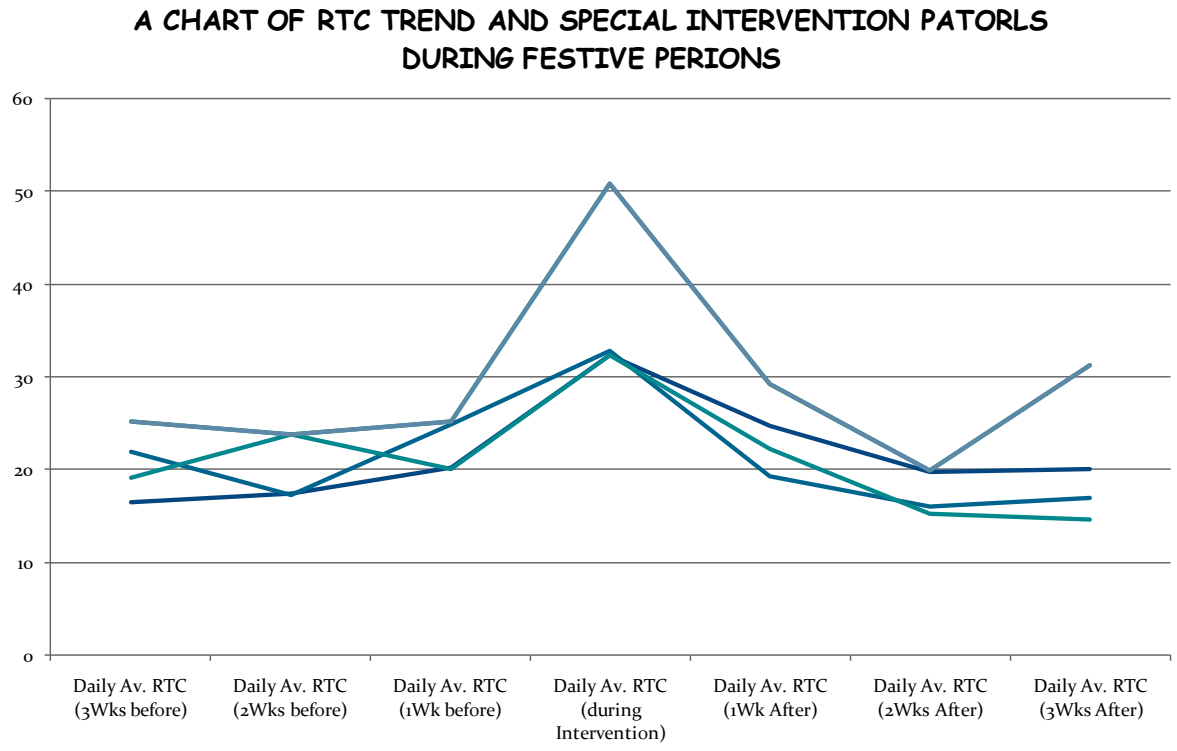
Red highlighted background indicates Special Intervention Patrols during Festive Periods



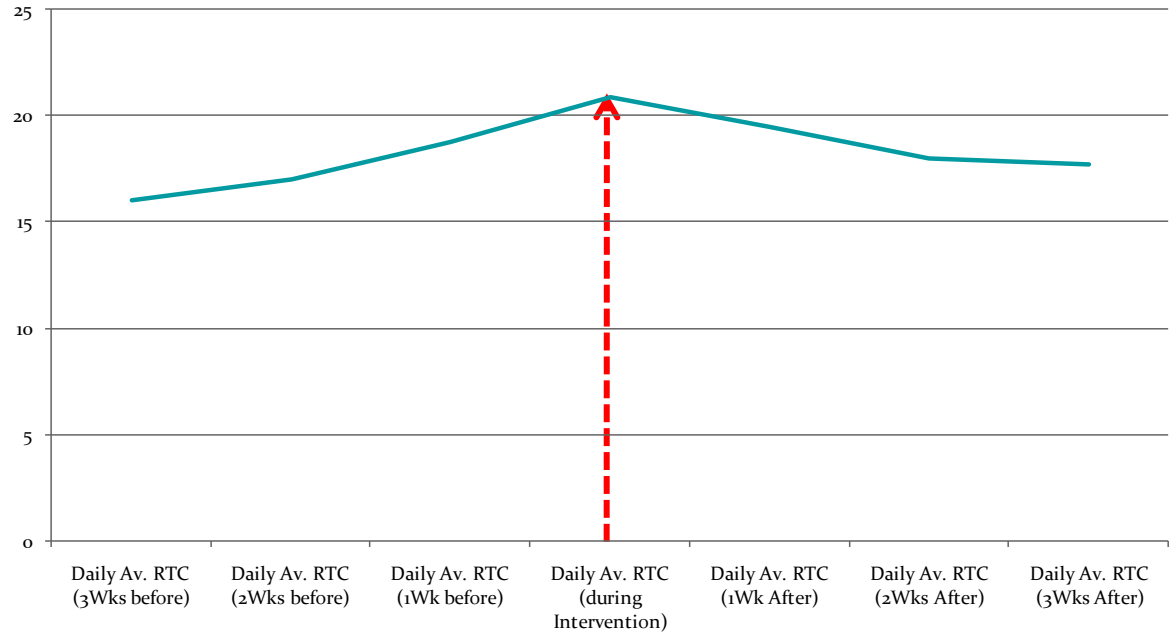

Easter patrol
35
30
25
20
15
10
5
0
Daily Av. RTC (3Wks before)
Daily Av. RTC (2Wks before)
Daily Av. RTC (1Wk before)
Daily Av. RTC (during Intervention)
Daily Av. RTC (1Wk After)
Daily Av. RTC (2Wks After)
Daily Av. RTC (3Wks After)


Eid-Il Fitri (Salah)
35
30
25
20
15
10
5
0
Daily Av. RTC (3Wks before)
Daily Av. RTC (2Wks before)
Daily Av. RTC (1Wk before)
Daily Av. RTC (during Intervention)
Daily Av. RTC (1Wk After)
Daily Av. RTC (2Wks After)
Daily Av. RTC (3Wks After)

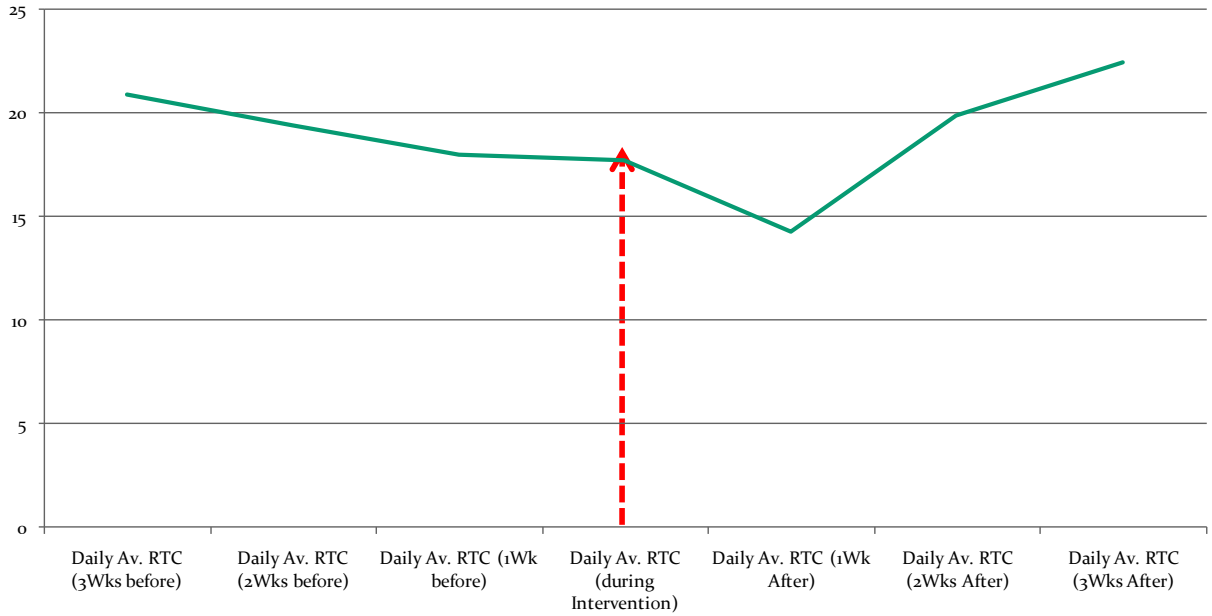

Eid-Il-Kabir (Salah)
60
50
40
30
20
10
0
Daily Av. RTC (3Wks before)
Daily Av. RTC (2Wks before)
Daily Av. RTC (1Wk before)
Daily Av. RTC (during Intervention)
Daily Av. RTC (1Wk After)
Daily Av. RTC (2Wks After)
Daily Av. RTC (3Wks After)


A CHART OF RTC TREND AND SPECIAL INTERVENTION PATORLS DURING FESTIVE PERIONS
60
50
40
30
20
10
0
Daily Av. RTC (3Wks before)
Daily Av. RTC (2Wks before)
Daily Av. RTC (1Wk before)
Daily Av. RTC (during Intervention)
Daily Av. RTC (1Wk After)
Daily Av. RTC (2Wks After)
Daily Av. RTC (3Wks After)

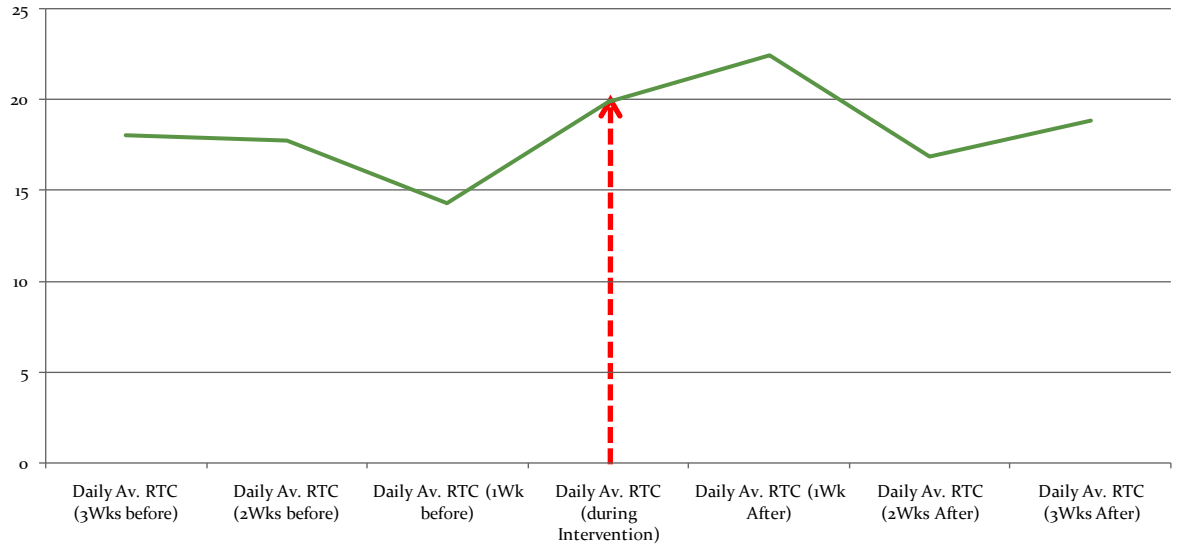
Operation Shield I



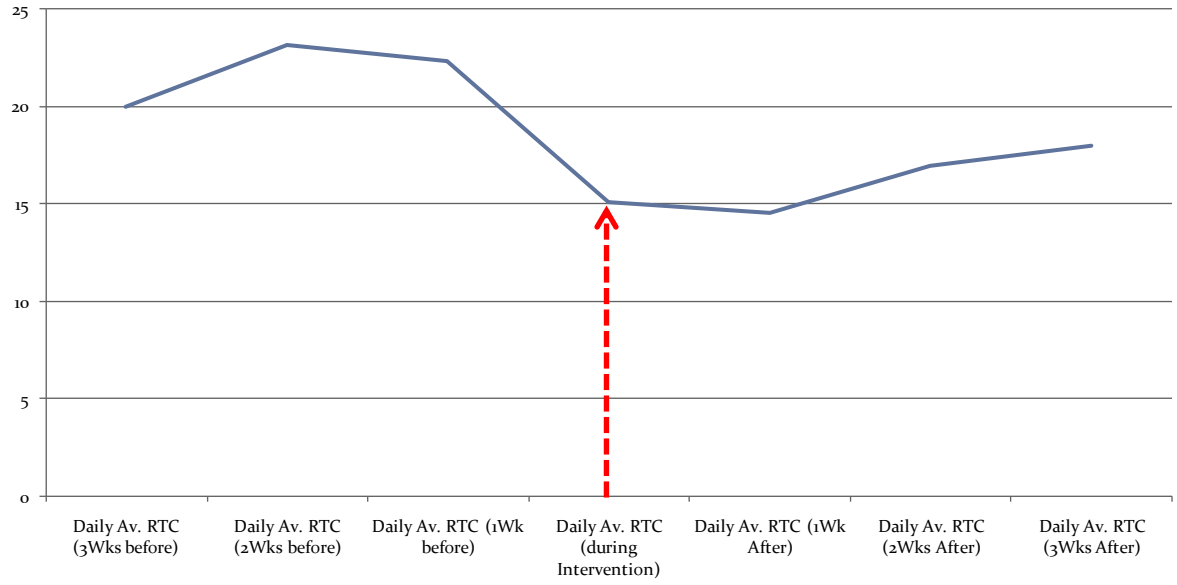
Operation Shield II



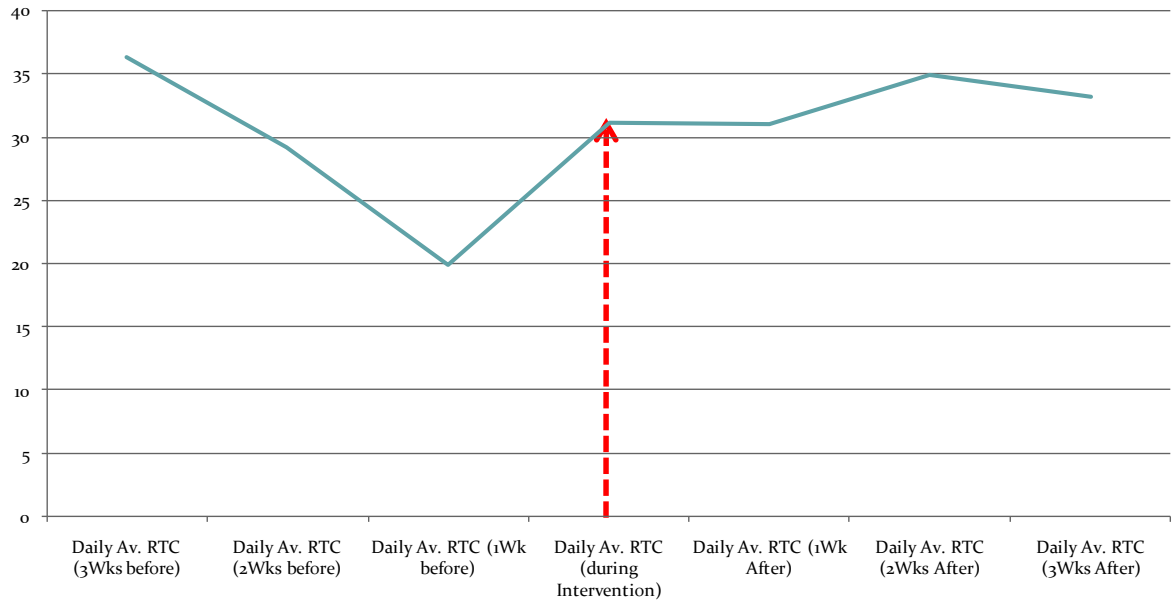
Operation Rainstorm



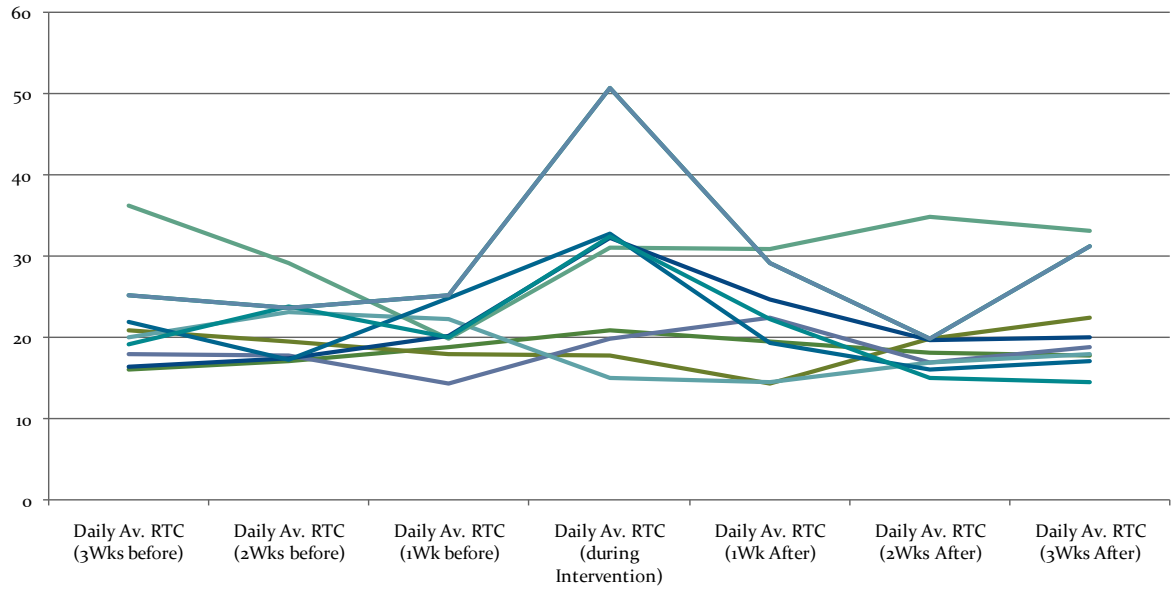
Operation Shield III



Operation Octopus



A CHART OF RTC TREND AND SPECIAL INTERVENTION PATORLS DURING NON-FESTIVE PERIONS



OBSERVATION/FINDINGS

I. A decline of RTC was observed within the first 2 weeks after Operation Zero 2012.

II. RTC was observed to constantly decline between 1st and 2nd week. However, RTC trend became constant after the 2nd week following the Easter patrol.

III. There was a minimal gradual reduction of RTC throughout the 3weeks after Operation Shield I.

IV. RTC declined within the 1st week after Operation Shield II. However, RTC began to rise sequentially thereafter.

V. RTC trends began to rise in the 1st week after the Operation Rainstorm, declined in the 2nd week and began to rise again in the 3rd week after the intervention.

VI. There was a significant reduction in RTCs 2 weeks after the Eid-il-Kabir (Sallah) patrol. However, RTC began to rise in the 3rd after the intervention.

VII. In Operation Octopus and Operation Shield III, RTCs reduced minimally within the 1st week and RTCs began to rise gradually in the 2nd week after both interventions.

VIII. Generally, RTCs were noted to be high during the special interventions. This could be attributed to increased reportage of Road Crashes during the Special Operations.

RECOMMENDATIONS

1) The Commands should be better equipped in terms of increased funding for Patrol activities and that basically what has led to RTC reduction is more visibility as more equipment and Personnel and deployed for the Operations.

2) The Commands could actually attain the same level of results if not more with better support from RSHQ. Pending when the Commands are in position to do this, the RSHQ interventions should be sustained.

Source: Federal Road Safety Corps (2013) – 'Analysis of Road Traffic Crashes and Special Patrol Intervention measures. An Unpublished Report of the Policy, Research and statistics Department of the Federal Road safety Corps, Abuja, Nigeria.

ANALYSIS OF ROAD TRAFFIC CRASHES PREDICTION FOR THE YEAR 2014

INTRODUCTION

The analysis of the road traffic crashes is being carried out on Quarterly basis to take care of the seasonal effect observed based on previous work done. The data used cover the period of 1st Quarter 2010 to 3rd Quarter 2013 as shown in Table and Graphs below. There is an indication that year 2013 is witnessing upward trend in number of road traffic crashes compared with past years (i.e 2010, 2011 and, 2012). Hence, there is need to take a practical steps to calm down the menace , there is likelihood of it hitting undesirable number of 3240, 2271 and 2449 crashes in 1st, 2nd and 3rd Quarters 2014 respectively using polynomial regression estimation with models:

$Y = 213.5X^2 - 615.5X + 1741$ for 4th Quarter 2013 estimation

$Y = 286X^2 - 1308.4X + 2632$ for 1st Quarter 2014 estimation

$Y = 70X^2 - 112.8X + 1085$ for 2nd Quarter 2014 estimation and

$Y = 73.5X^2 - 144.1X + 1331.5$ for 3rd Quarter 2014 estimation.

METHODOLOGY

Simple Table and Graphs were used in this analysis to show the seasonal variation and trend on Quarterly basis number of road traffic crashes recorded starting from 1st Quarter 2010 to 3rd Quarter 2013.
Also, Regression Analysis was adopted for the prediction of 4th Quarter 2013; 1st, 2nd and 3rd Quarters 2014.

ANALYSIS

ROAD TRAFFIC CRASH (RTC) DATA FOR 2010 - MID YEAR 2013 ON QUARTERLY BASIS

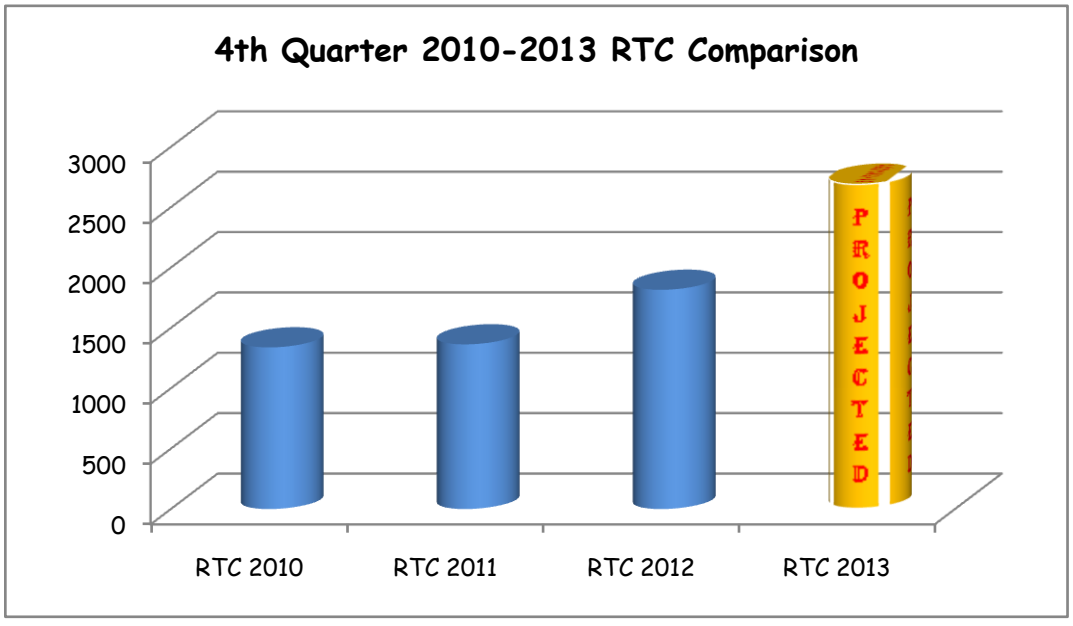
	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
RTC 2010	1584	1089	1318	1339	5330
RTC 2011	1236	999	1166	1364	4765
RTC 2012	1204	1517	1732	1816	6269
RTC 2013	2000	1707	1874	**2695**	**8276**
RTC 2014	**3240**	**2271**	**2449**		

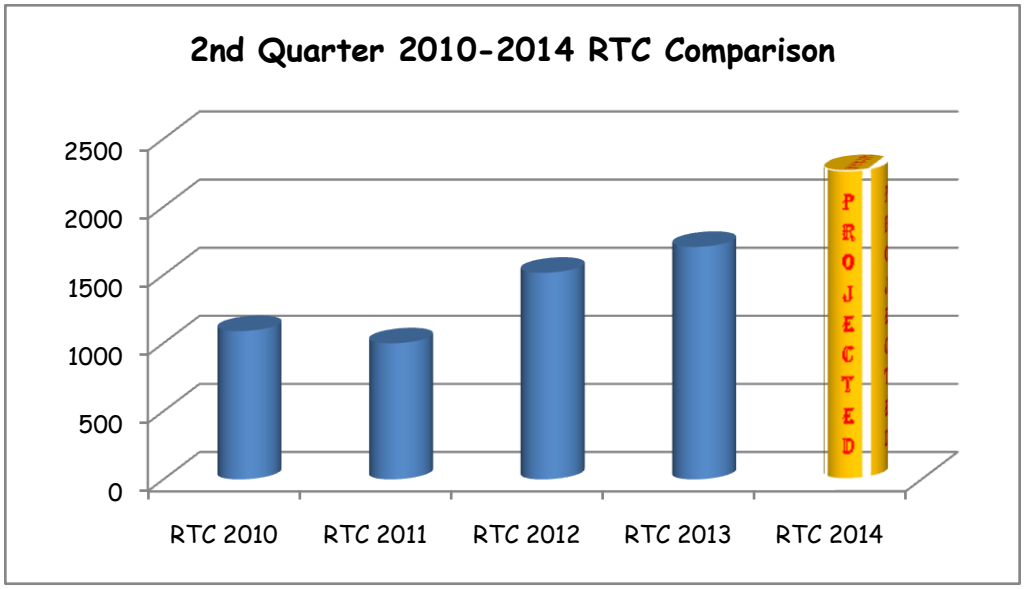
From the table above, a total of 2000 RTCs were recorded in 1st Quarter, 2013 which is the highest compare with other years under review i.e. 1st Quarter 2010, 2011 and 2012. It is worthy of note that there was 66% increase in number of RTCs in 1st Quarter 2013 as compared with 1st Quarter 2012; 61% increase in 1st Quarter 2013 when compared with 1st Quarter 2011 and 26% increase in 1st Quarter of 2013 as compared to 1st Quarter of 2010.

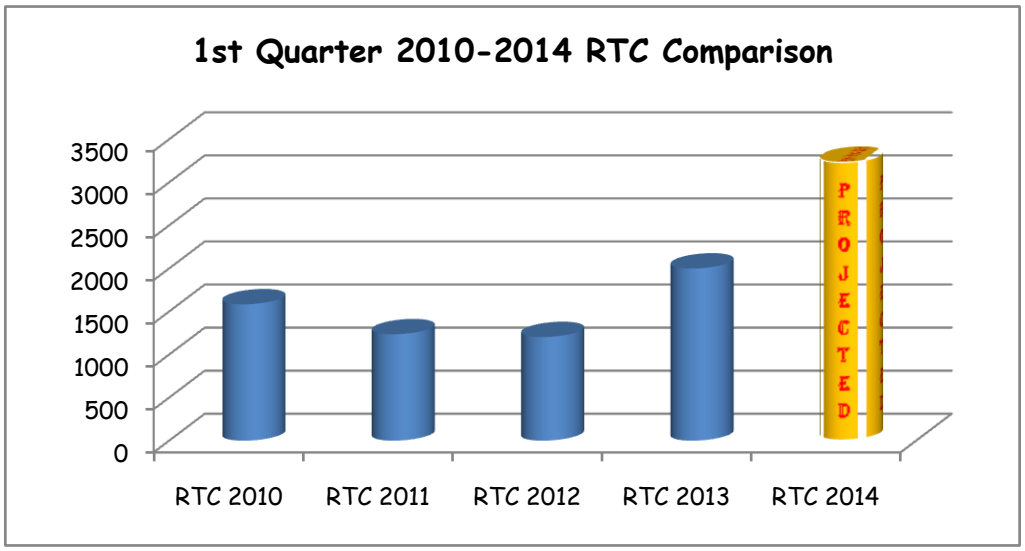
2nd Quarter 2013 also top the list of the number of RTCs with total number of 1707 crashes. In 2012, 12% increase was recorded, 70% increase observed in 2011 and 57% in 2010.

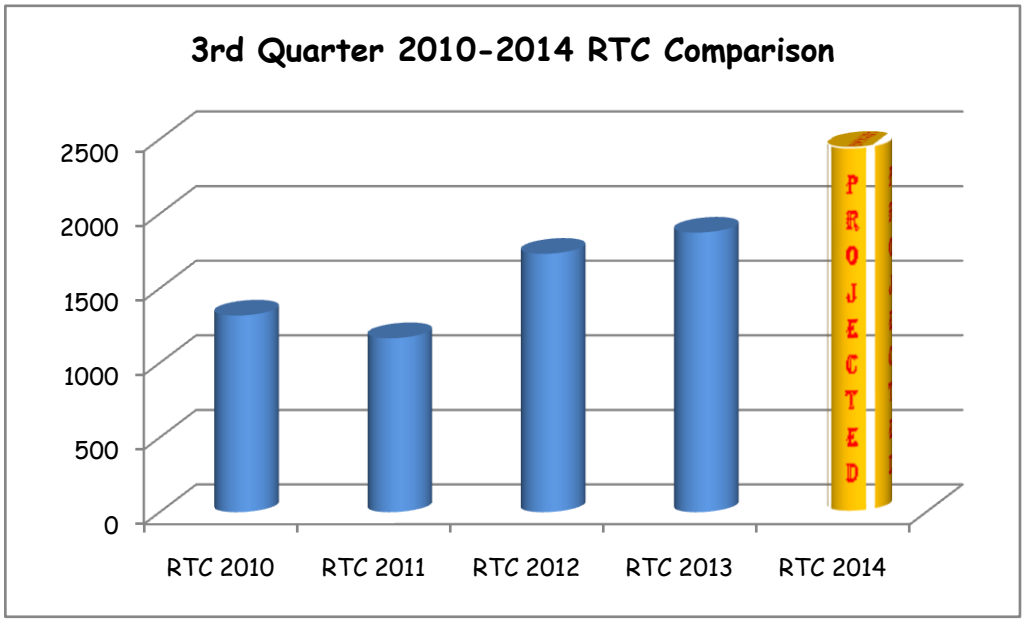
1874 crashes were also recorded in 3rd Quarter 2013; this represents 8.2%, 60.7% and 42.2% increment when compared with 3rd Quarter 2012, 2011 and 2010 respectively.

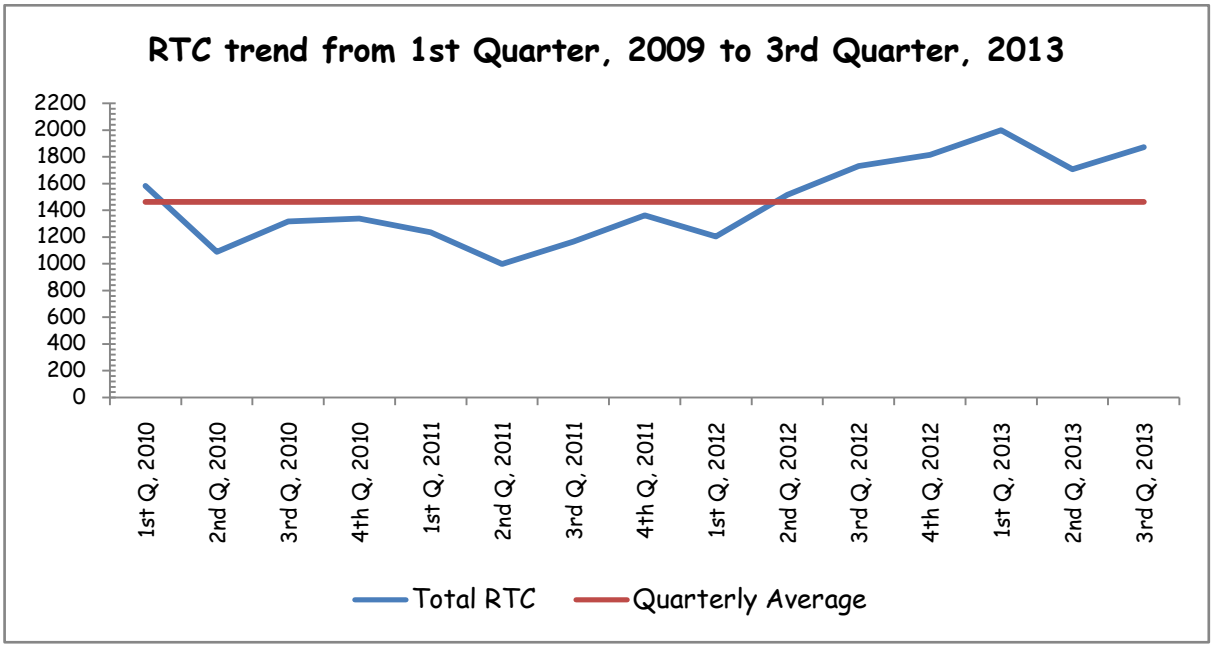
From the analysis, it can forecast using the regression polynomial model stated above, that the RTC prediction for **4th Quarter of 2013 is 2695 crashes, 1st Quarter 2014 is 3240 crashes, 2nd Quarter 2014 is 2271 crashes and 2449 RTCs in 3rd Quarter 2014** respectively.



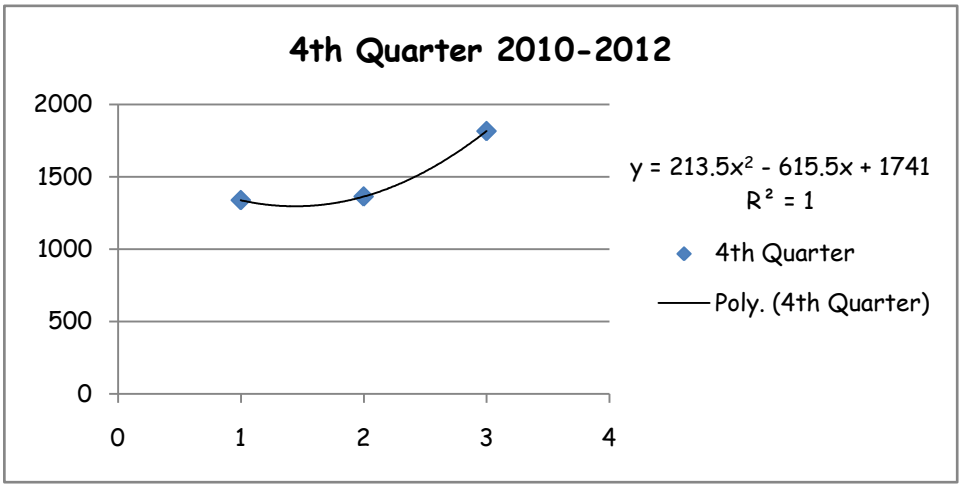

2nd Quarter 2010-2014 RTC Comparison
2500
2000
1500
1000
500
0
PROJECTED
RTC 2010
RTC 2011
RTC 2012
RTC 2013
RTC 2014

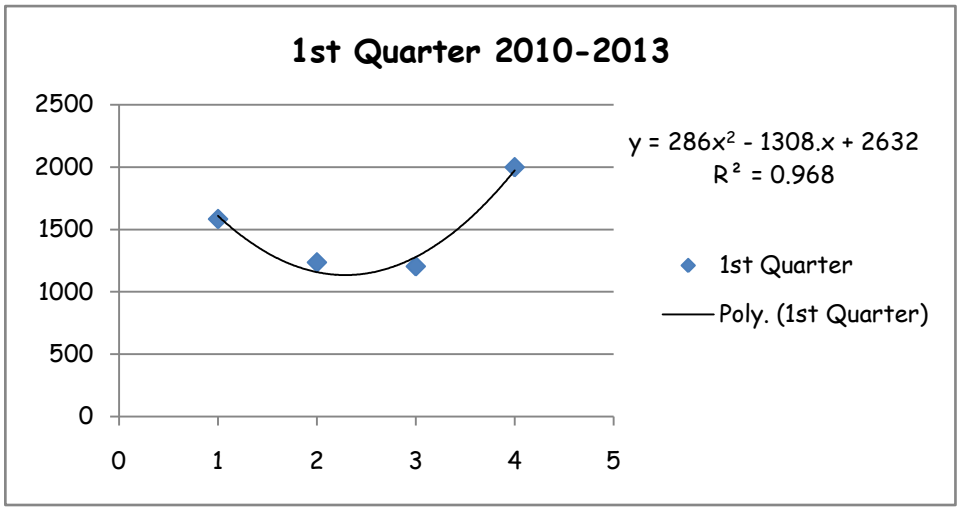

1st Quarter 2010-2014 RTC Comparison
3500
3000
2500
2000
1500
1000
500
0
PROJECTED
RTC 2010
RTC 2011
RTC 2012
RTC 2013
RTC 2014

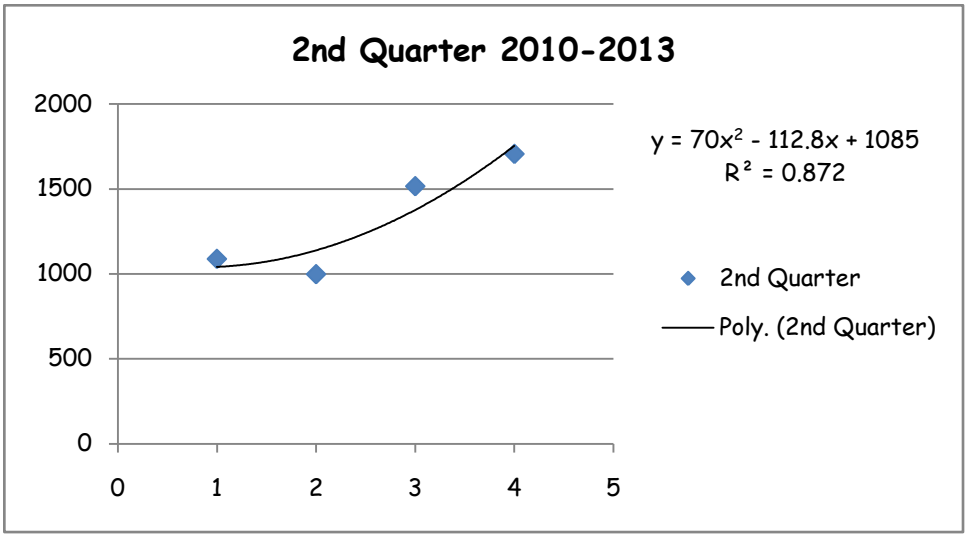

3rd Quarter 2010-2014 RTC Comparison
2500
2000
1500
1000
500
0
PROJECTED
RTC 2010
RTC 2011
RTC 2012
RTC 2013
RTC 2014

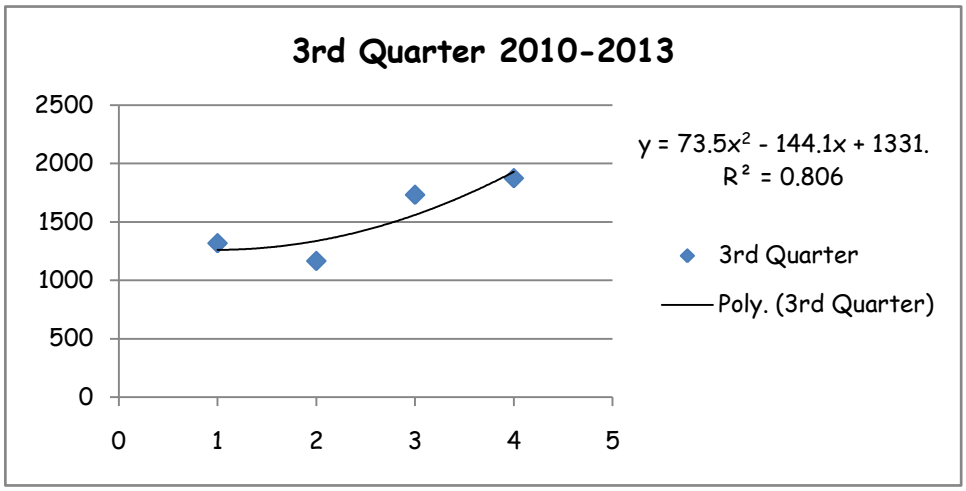


REGRESSION ANALYSIS OF RTC DATA ON QUARTERLY BASIS









RECOMMENDATIONS

This trend can be averted through pro-active measures like:

- Enforcement of Speed Limiters as speed violation as being identified as the major cause of RTCs in the country.
- Aggressive Public Enlightenment to educate motorists on the negative effects of crashes.
- Mobile Patrols to calm down motorists on the highways and ensure strict compliance with the speed limit rules.
- Special Intervention Patrol should be introduced in year 2014 to bring down the RTC cases.

BECOMING A RESPONSIBLE, CONFIDENT AND SAFE DRIVER

Written by:

Adewale T Akande, an Author and Road Safety Traffic Consultant based in Barcelona, Spain-is presently in Nigeria on World Bank project assignment on implementation of Governance Accountability Action Plan in the Road Sector.

Driving is a serious responsibility with physical and mental abilities impacting on the driving activities of a driver. It is more than moving a vehicle and knowing how to use the accelerator, brake pedals and steering. Driving is at best when you have knowledge and required skills to drive competently in accordance with those rules and regulations guiding the public roads. A safe and responsible driver has responsibility which makes him a good citizen. Driving is a learned skill acquired with much practice. It is also more important to drive with due regards for safety and convenience of other road users. Driving entails concentration, calmness, and with consideration and respect for others. And at the same time, a driver should ensure proper and total control of his vehicle at all times. That means a driver must not allow anything to take their attention from the road, therefore good anticipation and concentration will help to prevent these usual incident becoming accidents on our roads. The safety of others depends on you when you are on the wheel.

Moreover, a good and responsible driver will always remember that the three most vulnerable elements at the road junctions and roundabouts are pedestrians, cyclists and motorcyclists. These people have to be recognised and respected. They should be given priority in all ramifications; in zebra crossings (pedestrians' crossings), foot paths or sidewalk or pavement, junctions and roundabouts. That is why concentration and good judgement at all times are parts of requirement needed to qualify a person as a responsible and good driver. More importantly, a driver must meet the minimum age requirement and hold appropriate driving licence and basic insurance for the vehicle being driving on public roads.

The practice of issuing driving licence to people without meeting the standard driving test and practical training is nothing less than giving out licence to kill. This is common almost all developing countries of Africa, Asia and South America. Some people will receive their driving licence without able to distinguish between a clutch and brake pedals. There is no probability that anyone that got his licence in such manner will not have an accident (let's pray to be minor) which can cause a devastating set-back to family of the accident victims. An estimated of 1.17 million deaths occur each year worldwide due to road accidents. The majority of these deaths, about 70 percent occur in developing countries. Over 10 million people are crippled or injured each year.

Meanwhile, a safe and responsible driver have responsibility in obeying and minding the rules of the road, risk perception, hazard awareness, eco-driving (frequent check-up or maintenance of their vehicle for safety and reduction of air pollution) and good driving behaviour. The first important safety guide for a driver is good condition of the vehicle in question. As we know that not only human errors or condition of the roads can lead to accident, equipment failure can also be responsible. Frequent or regular maintenance or "check-up" of your vehicle can prevent it from endangering lives. The vehicle engine, Brakes, Seat Belts, Headlights, Tyres (including spare-tyres), Wipers, Indicators, Steering-wheel, and Speedometer etc should be in good conditions. With all these in order, you have already passed an important part of safety driving.

Low seat belts wearing rates in developing have significantly contribute to automobile accidents and serious injuries. Seat belts will reduce the forces your body experiences in a crash. It keeps you from flying through the dashboard and windscreen in a sudden stop or crash. A responsible driver must put on his seat belt before moving his vehicle and must ensure that other passengers including children wear the correct and approved restraint appropriate to their size and weight. You should not risk your life and that of other with bad, loosed, fragile or fake seat belts. A properly worn seat belt protects the mother and the unborn baby in any unforeseen crashes.

Alcohol, drug and tobacco are other negative elements that cannot be "mix-up" with driving. These two elements are driving enemies and they should be avoided with much seriousness. Never drink alcohol when you have a plan to drive and never offer an alcoholic drink to someone else who is intending to drive. It is more advisable to arrange for somebody to pick you up or you go with public transport if you must drink in a party. The result of an accident through drinking touch many people, it is not just only those physically involved, but many relations, families, friends, ambitions and careers can be ruined in a split of second. Have you ever seen any human being on earth who has never been affected by accident either directly or indirectly? That is why it is collective responsibility of every living souls to participate and involve in this mission to eradicate or reduce the ever increasing volumes of accidents worldwide. Nearly one-third of teen drivers who were killed in motor vehicle accidents had been drinking according to recent world research.

Meanwhile, Alcohol affects your judgement and abilities while driving, it slows your reaction to obstacles on the roadway and it reduces coordination and total control of the vehicle apart from given a false sense of confidence. Alcohol relaxes you and increases your chances of falling asleep on the wheel. Alcohol level rises quickly on empty stomach and intensity or tolerance effects of alcohol differs and depends on a range of factors such as age, weight, gender, metabolism, current stress level, quantity of alcohol and whether the person have eaten recently. The effect of alcohol manifests its maximum point in human body one hour after the last cup of beer. So you have to take a long sound sleep after a hangover of alcoholic drinks before handling a steering. A driver should not drive under the influence of drugs or medicine which is banned and very dangerous risk to serious accident. In essence, you should not drug drive that is "don't drug drive". Some prescribed drugs you bought on chemist or pharmacy shops like sedative and analgesics (pain relievers) can result to drowsiness, blurred vision and tranquillisers like cough syrup, cold tablets and sleeping tablets can reduce driving ability. You must not take medication less than an hour before driving.

Smoking on its part cause distractions while driving, produces smoke that irritates to the eyes and can easily lead to drowsiness in few minutes as you start smoking.

Over-Speeding and Gamble Over-taking are other negative elements that a good and responsible driver should avoid in all ramifications. It is forbidden to overtake when you don't have the best view of the road ahead or when in doubt. Drivers are prohibited to overtake on pedestrian crossing and railway or metro crossings respectively. Speed kills. Over-speeding have sent many people to grave beyond. It is basic fact without embarking on any research that "the faster you drive on the road, the more likely you are to crash". Driving is transportation and not competition or race among drivers like Schumacher, Hamilton, Alonso, Button etc. The higher the speed of a vehicle, the longer the braking distance. Besides, stopping distance is doubled on wet roads. Driver should always obey the speed limits for road and for his vehicle. Driving a vehicle without a functioning speedometer should be taken as serious traffic offence in African and Asia countries. So, it is better to late to your destination (if you cannot leave earlier) than to be the **late**.

Two-Second-Gap-Rule (TSGR) is another factor that can make a driver safe and responsible on the road way. There is a dictum which says; "Only a fool breaks the two-second-gap-rule" This is a safety margin that all drivers should allow as a safe separation distance between you and the vehicle in front. This have to be doubled (four-second-gap-rule) on wet roads or when its rainy. It never safe when driving too close to vehicle in front. It gives time to react. This is one of the best safe driving principles.

Telephone is an important use of communication especially in emergency period or while away from home or office, but it should be avoided while on steering. Using of mobile or any other hand-held telephones are prohibited while driving throughout the world. It is now a serious traffic offence to be communicating or sending or reading messages with your mobile phone while driving on public roads. It is better and more appropriate to pull over to a save place to receive or make a call.

Obeying all traffic rules and regulations is another important requirement to be a safe and responsible driver. Most accidents occur because some drivers fail to recognise, respect and obey some important traffic signs and road markings. All drivers must always stop at the **STOP** sign even if there is no vehicle coming from either sides. **Red traffic triangles** usually give you a **warning**. **Red circles** traffic sign tells you what you

must not do. **Blue** rectangle traffic signs usually gives you **information** and **Circular traffic** sign with **blue** background tells you what you **must do**. Road markings are also very important as traffic road signs. **Solid while lines** on the road means **do not cross**. **Broken white lines** means that your vehicle **can cross** and **triangle lines** on the road junction also give you instructions such as to **stop or give way**. Meanwhile, **yellow lines** road marking are used to make some form of **waiting restriction**. There are two types; **double yellow lines** mark length of the road, where there is no waiting at any time. **Single yellow line** indicates a shorter period of restriction such as a day time. Besides, all drivers should obey and pay special attention to all supplementary signals and personal assigned to regulate traffic by traffic authority or road under construction which all signs have a yellow background.

Meanwhile, a responsible driver should always slow-down and give way to pedestrians on zebra crossings and when turning to a new street road and people are crossing. Driver should recognise that children and old mummies and daddies on the road. They always find it difficult to judge the speed at which a vehicle is approaching because as they are getting older, their sight, hearing and reaction times may not be as sharp as they were used to be in the "good old days". Children on their own part tend to focus on one thing at a time and as they are small in size which makes it difficult for drivers to see them. Avoid driving in poor weather such as wind blowing, night travelling and heavy-rainfall because, when it comes to vision, human eyes takes a long time to adjust to changing light. Driving a passenger vehicle with a capacity of more than twelve passengers should have a first-aid kit, a spare tyre and at least one fire extinguisher and emergency exit doors and windows. It is very important to have periodical eyes test that ensure your eyes have not deteriorated especially when you need glasses to read vehicle number plates.

Finally, a responsible, confident and safe driver have responsibility in obeying and minding the rules of the road, risk perception, hazard awareness, eco-driving (frequent "check-up" or maintenance of their vehicle for safety and reduction of air pollution) and good driving behaviour. And most importantly, you should have total control of yourself, the vehicle and your immediate environment to ensure a safe and responsible driving habit. It is definitely not a joking matter as there is no replacement for a life lost or

permanent disability due to road accidents. Always remember that a minute patience or endurance with other road user can save a life.