

ROAD TRAFFIC CRASHES (RTC) INVOLVING TANKERS AND TRAILERS ON NIGERIAN ROADS (2007 - JUNE, 2010)-A REPORT

A. INTRODUCTION

Uncomfortable with the high incidences of articulated lorries (tankers and trailers) crashes in Nigeria, and as a step towards the implementation of the stakeholders' approved "Safety Requirements/Guidelines for Articulated Lorries (Tankers and Trailers) in Nigeria", the Corps Transport Standardization Office of the Federal Road Safety Corps (FRSC), Nigeria, on the directive of the Corps Marshal and Chief Executive, FRSC collated Road Traffic Crash data involving Tankers and Trailers from all the states of the Federation and analyzed these with a view to proffering solutions to the menace of these articulated lorries on our highways.

The contributions of the articulated lorry operators to the national economy is huge, as we have on the average, about 3,000 tankers involved in wet cargo haulage and 1,500 "trailers" in dry cargoes plying Nigerian roads daily. Hence the major concern of the Corps.

B. METHODOLOGY

a. DATA COLLECTION

- i. Records of Road Traffic Crashes (RTC) involving Tankers and Trailers as recorded by the FRSC were collated from all the FRSC Commands across the country.

The data on every recorded crash in 2007, 2008, 2009 and 2010 (Jan. - June) were in the following details:

- Date of Road Traffic Crash (RTC)
 - Day of the week.
 - Vehicle Registration Number
 - Vehicle Type
 - Route
 - Location
 - Time of Road Traffic Crash (RTC)
 - No of persons killed
 - No of persons injured
 - No of persons involved
 - Total no of vehicles involved and
 - Causes of RTC
- ii. Survey on the siting of illegal Tankers and Trailers Parks as at September, 2010 was also conducted across the nation.

b. **DATA ANALYSIS**

The data were analyzed using simple descriptive statistics such as percentages while graphs and pie-charts were also employed for graphical illustrations.

C. ANALYSIS AND FINDINGS:

Presented below is the analysis of the obtained data and the findings.

a. TOTAL CRASHES:

It was revealed that between 2007 and June 2010, a total of 4,017 Tankers/Trailers crashes were recorded on Nigerian roads with a yearly average of 1,148 cases and monthly average of 96 crashes. 607 Tankers/Trailers crashes were recorded in 2007, the figures rose to 1,229 in 2008, which is 102.47% increase. In 2009, the crash records reduced by 1.30% to 1,213 and as at June 2010, 968 crashes had so far been recorded for the year, which showed that the rate of crashes involving Tankers and Trailers is on the increase. (See Table 1 and Figure 1) This is further evident in the monthly crash average of 51 in 2007, 102 in 2008, 101 in 2009 and as at June in 2010, 161 crashes occurred on average monthly basis. (See Table 1b and Figure 1b). The data analysis also revealed that on daily average basis 1.66 crashes occurred in 2007. This rose to 3.37 in 2008, 3.32 crashes in 2009 and in 2010, 5.31 Tanker/Trailer crashes occurred on Nigerian roads. (See Table 1c and Figure 1c)

b. NUMBER KILLED:

Between 2007 and June, 2010, a total of 4,076 persons were killed in crashes involving tankers and trailers. In 2007, the crashes led to the death of 805 persons. It rose to 1,221 in 2008 (51.68% increase), and 1,085 representing 11.14% reduction in 2009, and as at June 2010, 965 persons were killed, (See Table 1 and Figure 1). On the average 97.05 persons were killed monthly in crashes involving Tankers and Trailers between 2007 and June 2010. An average of 67.08 persons were killed monthly in 2007, the figure rose to 101.75 in 2008, 90.42 in 2009 and 160.83 in 2010. It was also discovered that while an average of 2.21

persons got killed per day in 2007, the number increased to 3.35 in 2008. 2009 and 2010 (Jan.-June) had daily average death figure of 2.97 and 5.30 respectively. Hence between 2007 and Jan.-June 2010, an average of 3.19 persons were killed daily in crashes involving Tankers and Trailers on our roads. (See Table 1b and 1c and Figures 1b and 1c)

c. NUMBER OF PERSONS INJURED:

During the period 2007 to June 2010, a total of 12,994 persons were injured in tanker/trailer crashes with a monthly and daily average of 309.38 and 10.16 respectively. In 2007, 2,169 persons got injured. In 2008, the figure rose to 3,891 which is 79.39% as the figure reduce to 3,714 which is a further 4.55% decrease in 2009. Also, between January and June 2010, 4,076 deaths were recorded. (See Table 1 and Figure 1). On the average 180.75 persons were injured monthly in 2007 and the figures rose to 315.92, 309.5 and 536.67 in 2008, 2009 and Jan.-June 2010 respectively. The injuries resulting from tankers and trailers crashes on a daily average also increased from 5.94 in 2007, 10.39 in 2008, 10.18 in 2009 and as high as 17.69 persons were injured per day in 2010. (See Tables 1b, 1c and Figures 1b and 1c).

d. TOTAL CASUALTIES:

2,974 persons were either injured or killed in "Tankers/Trailers" crashes in 2007, and a 71.89% increase in 2008 led to a total casualties of 5112 and in 2009, a total of 4,799 which is 6.12% decrease were recorded and as at June, in 2010, 4,185 persons had been killed or injured in crashes involving articulated trucks. (See Table 1 and Figure 1). On monthly basis, 404.05 persons, on the average were either killed or injured in tanker/trailer accidents on Nigerian roads between 2007 and June 2010.

Further analysis showed that the monthly average casualties figures for 2007 is 247.83 and in 2008, the figure rose to 417 and decreased to 399.92 in 2009 and geometrically rose to 697.5 casualties per month in 2010 (June). (See Tables 1b and 1c and Figures 1b and 1c).

Also it was discovered that 8.15 casualties on the average were recorded daily in 2007, 13.73 in 2008, 13.15 in 2009 and 22.99 in 2010 (June). (See Tables 1b and 1c and Figures 1b and 1c).

e. NUMBER OF PERSONS INVOLVED:

In 2007, 4,430 persons were involved and a 57.99% increase resulting in 6,999 persons were involved in 2008 and in 2009, the figure rose by 14.64% to 8024 and by June 2010, as many as 6909 recorded persons were involved in Tankers/Trailers crashes. (See Table 1 and Fig 1). 627.67 persons on the average were involved on monthly basis and 20.64 persons daily in Road Traffic Crash (RTC) involving Tankers and Trailers on Nigerian roads. In 2007, the monthly average was 369.12 while the daily average number of persons involved was 12.14. In 2008, 583.25 monthly average and 19.18 daily average were recorded. The figures rose to 669 monthly and 21.98 daily in 2009 and as at June 2010, the monthly figure for persons involved on the average there was a noticeable steady rise in the number of

persons involved in the crashes involving Tankers and Trailers. (See Tables 1b and 1c and Figures 1b and 1c)

f. TOTAL NUMBER OF VEHICLES INVOLVED:

For 2007, the record revealed that 976 vehicles were involved in crashes. In 2008, an increase of 69.57% was recorded as the figure rose to 1,655 while in 2009, 1,767 (6.77%) increase was recorded. Half yearly, in 2010, the figure rose to 1,427 vehicles involved in the crashes. (See Table 1 and Fig 1). An average of 138.69 vehicles was crashed monthly between 2007 and June 2010 in Road Traffic Crash (RTC) involving Tankers and Trailers with a daily average of 4.56. The rise in the risk involvement is further evident as the figures rose from 81 average monthly crashed vehicles in 2007 to 137.92 in 2008, 147.25 in 2009 and 237.83 in Jan.-June 2010. The daily average crashed vehicles in this Road Traffic Crash (RTC) also rose from 2.67 in 2007, to 4.53 in 2008 and 4.84 in 2009. In Jan.-June 2010, it was discovered that an average of 7.84 vehicles crashed per day in Tanker and Trailer crashes on Nigerian roads. (See Tables 1b and 1c and Figures 1b and 1c).

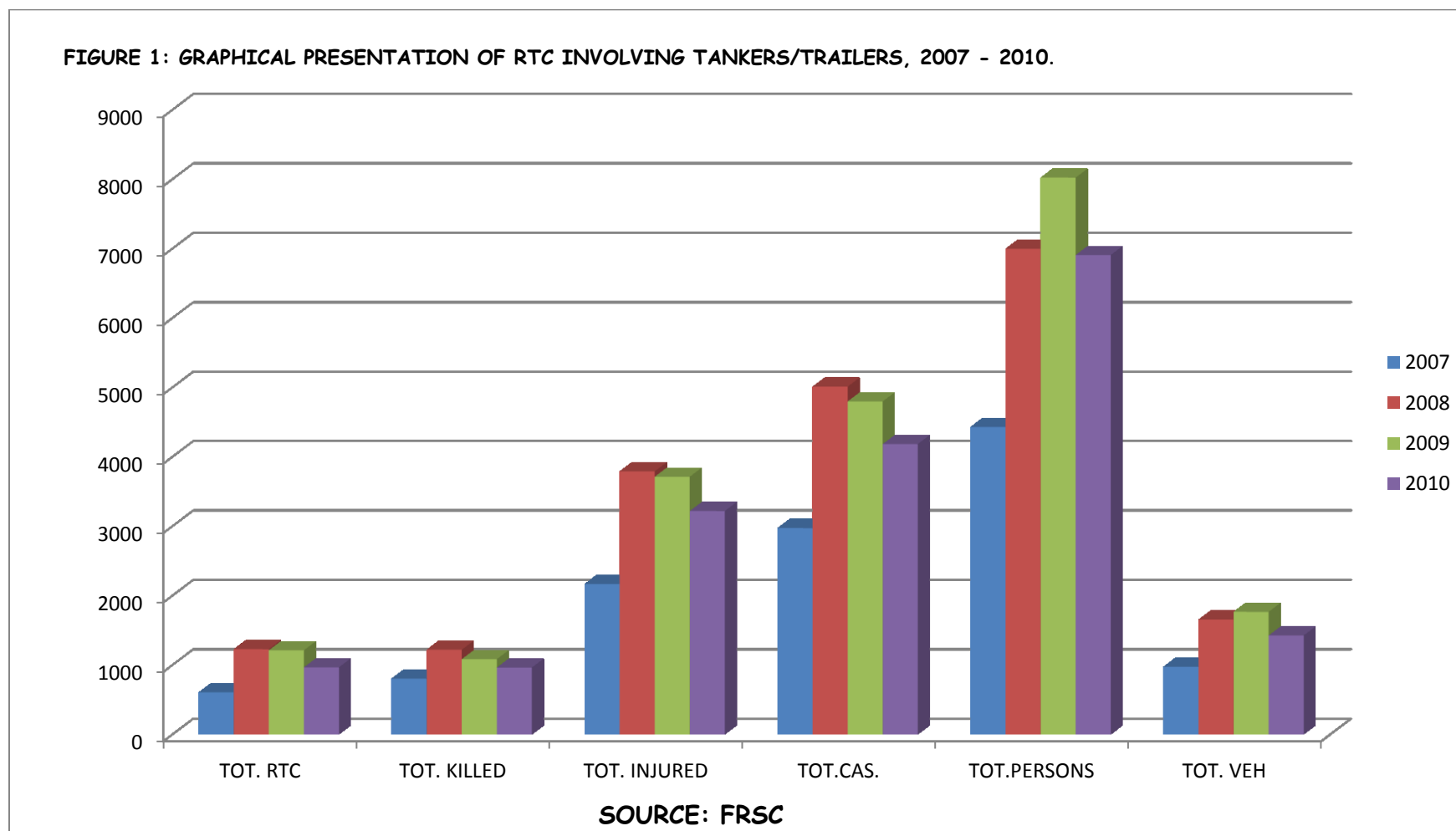
Table 1: RECORD OF CRASHES INVOLVING "TANKERS/TRAILERS"
(2007 - JUNE, 2010)

YEAR	TOT. RTC	TOT. KILLED	TOT. INJURED	TOT.CAS.	TOT.PERSONS	TOT. VEH
2007	607	805	2169	2974	4430	976
2008	1229	1221	3891	5112	6999	1655
2009	1213	1085	3714	4799	8024	1767
2010	968	965	3220	4185	6909	1427
2007-June 2010	4017	4076	12994	17070	26362	5825

NOTE: 2010 - JANUARY TO JUNE ONLY.

SOURCE: FRSC.

**FIGURE 1: GRAPH OF RECORDS OF CRASHES INVOLVING
TANKERS/ TRAILERS (2007 - JUNE, 2010)**



Source : FRSC

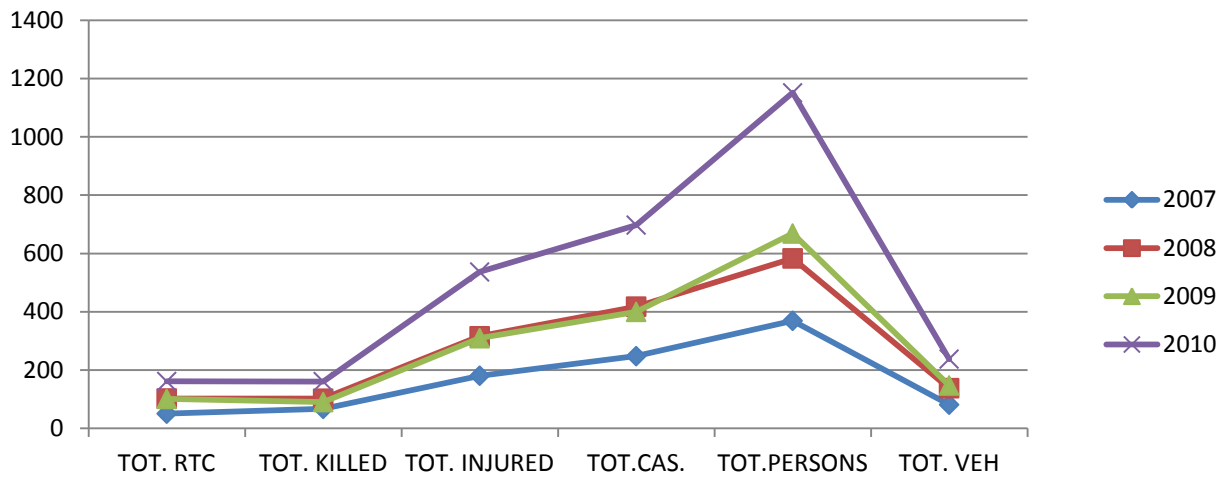
TABLE 1b: AVERAGE MONTHLY TANKERS/TRAILERS CRASH RECORDS.						
	TOT. CRASH	NO KILLED	NO INJURED	TOTAL CASUALTIES	NO OF PERSONS INV	TOTAL VEH.
2007	50.58 (51)	67.08 (67)	180.75 (181)	247.83 (248)	369.12 (369)	81.33 (81)
2008	102.42 (102)	101.75 (102)	315.92 (316)	417.67 (418)	583.25 (583)	137.92 (138)
2009	101.08 (101)	90.42 (90)	309.5 (310)	399.92 (400)	668.67 (669)	147.25 (147)
2010	161.33 (161)	160.83 (161)	536.67 (537)	697.5 (698)	1151.5 (1152)	237.83 (238)
2007-JUNE 2010	95.86 (96)	97.05 (97)	309.38 (309)	404.05 (405)	627.67 (628)	138.69 (139)

SOURCE : FRSC

TABLE 1c: AVERAGE DAILY TANKERS/TRAILERS CRASH RECORDS.						
	TOT. CRASH	NO KILLED	NO INJURED	TOTAL CASUALTIES	NO OF PERSONS INV	TOTAL VEH.
2007	1.66 (2)	2.21 (2)	5.94 (6)	8.15 (8)	12.14 (12)	2.67 (3)
2008	3.37 (3)	3.35 (4)	10.39 (10)	13.73 (14)	19.18 (19)	4.53 (5)
2009	3.32 (3)	2.97 (3)	10.18 (10)	13.15 (13)	21.98 (22)	4.84 (5)
2010	5.31 (5)	5.30 (5)	17.69 (18)	22.99 (23)	37.96 (38)	7.84 (8)
2007 - JUNE 2010	3.15 (3)	3.19 (3)	10.16 (10)	13.37 (13)	20.64 (21)	4.56 (5)

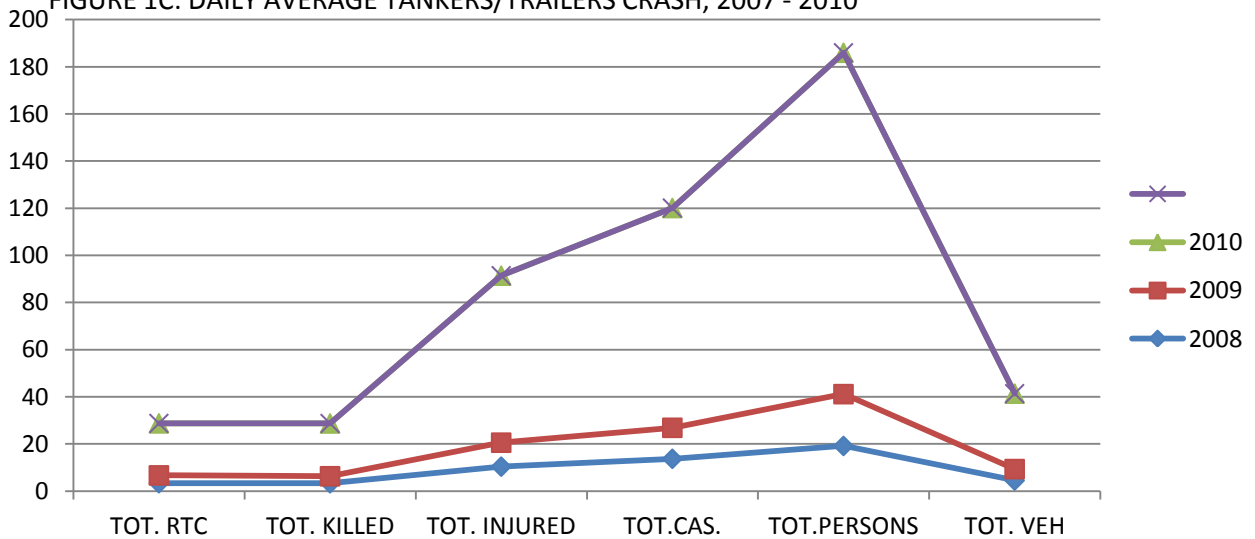
SOURCE : FRSC

FIGURE 1B: AVERAGE MONTHLY TANKERS/TRAILERS CRASH, 2007 - 2010.



SOURCE : FRSC

FIGURE 1C: DAILY AVERAGE TANKERS/TRAILERS CRASH, 2007 - 2010



SOURCE : FRSC

g. STATE BY STATE RECORDS OF TANKER/TRAILER RTC:

In 2007, the highest tanker/trailer RTC cases occurred in Ogun state with 54 cases (8.90%), Oyo, 40 cases (6.59%) FCT, 39 (6.43%), Kaduna 39 (6.43%), Ondo 38 (6.26%), Kano, 38 (6.26%), Niger, 37 (6.09%). Least articulated crashes were recorded in Adamawa state with only 1 crash which is 0.16% of the total crashes. (See Table 2 and Figure 2a -2f.)

In 2008, Ogun State also recorded the highest crashes of 187 which is 15.22% of the total. Kogi, Kwara, Nasarawa, Benue and Kaduna had total crashes of 104 (8.46%), 95 (7.73%), 88 (7.16%), 67 (5.45%), and 64 (5.21%), respectively. Least crashes were recorded in Adamawa, Bayelsa and Ebonyi with 1 (0.08%), respectively (See Table 3 and Figure 3a -3f)

In 2009, the highest crashes involving "tankers/trailers" occurred in Ogun state with 175 (14.43%). Kwara 95 (7.83%), Kogi 94 (7.75%), Nasarawa 88 (7.25%) and Benue 67 (5.52%) followed in that order. The least crashes involving "tankers and trailers" occurred in Adamawa, Taraba, Enugu and Kebbi with 1 case (0.08%) each. (See Table 4 Figure 4a -4f)

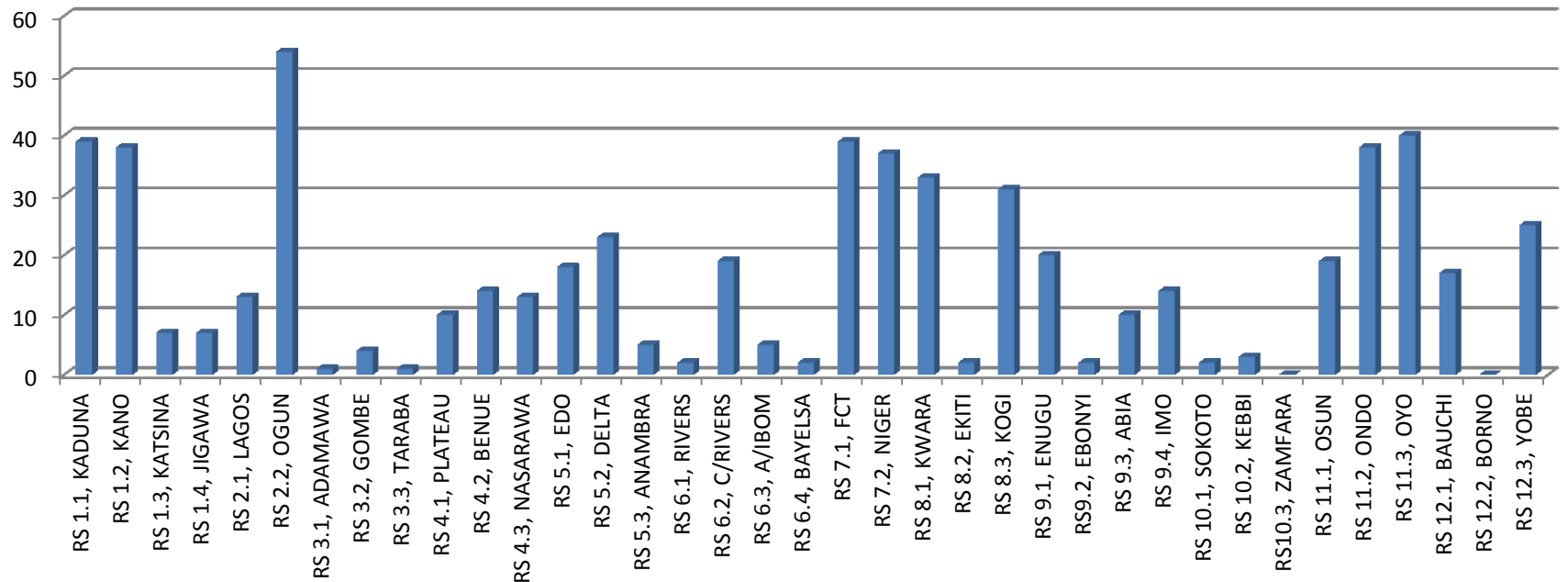
As at June in 2010, Ogun with 104 (10.74%) cases had the highest number of tanker/trailer crashes, FCT 87 (8.99%), and Nasarawa 81, (8.37%), Kogi 68 (7.02%). Taraba and Adamawa states recorded the least crashes with 1 case (0.10%) each. (See Table 5 and Figure 5a-5f)

TABLE 2: 2007 RTC INVOLVING TANKERS/TRAILERS.

S/N	SECTOR	TOTAL RTC	NO. KILLED	NO. INJURED	TOTAL CASUALTY	NO. OF PERSON INVOLVED	NUMBER OF VEH. INVOLVED
1	RS 1.1, KADUNA	39	186	314	500	529	94
2	RS 1.2, KANO	38	18	195	213	311	43
3	RS 1.3, KATSINA	7	9	19	28	30	8
4	RS 1.4, JIGAWA	7	18	50	68	84	10
5	RS 2.1, LAGOS	13	21	54	75	135	28
6	RS 2.2, OGUN	54	43	112	155	314	84
7	RS 3.1, ADAMAWA	1	7	26	33	40	2
8	RS 3.2, GOMBE	4	3	2	5	5	5
9	RS 3.3, TARABA	1	3	1	4	4	1
10	RS 4.1, PLATEAU	10	-	16	16	58	21
11	RS 4.2, BENUE	14	8	22	30	46	17
12	RS 4.3, NASARAWA	13	28	52	80	112	29
13	RS 5.1, EDO	18	32	52	84	84	34
14	RS 5.2, DELTA	23	11	51	62		43
15	RS 5.3, ANAMBRA	5	6	8	14	14	6
16	RS 6.1, RIVERS	2	2	3	5	3	2
17	RS 6.2, C/RIVERS	19	7	21	28	67	30
18	RS 6.3, A/IBOM	5	2	5	7	17	10
19	RS 6.4, BAYELSA	2	4	1	5	8	2
20	RS 7.1, FCT	39	7	48	55	119	59
21	RS 7.2, NIGER	37	12	68	80	142	45
22	RS 8.1, KWARA	33	102	192	294	498	45
23	RS 8.2, EKITI	2	1	3	4	7	2
24	RS 8.3, KOGI	31	65	116	181	445	34
25	RS 9.1, ENUGU	20	26	54	80	144	34
26	RS9.2, EBONYI	2	-	4	4	8	3
27	RS 9.3, ABIA	10	18	36	54	69	16
28	RS 9.4, IMO	14	8	13	21	25	22
29	RS 10.1, SOKOTO	2	13	42	55	90	2
30	RS 10.2, KEBBI	3	6	28	34		4
31	RS10.3, ZAMFARA	-	-	-	-	-	0
32	RS 11.1, OSUN	19	16	64	80	81	20
33	RS 11.2, ONDO	38	35	144	179	343	65
34	RS 11.3, OYO	40	37	91	128	190	76
35	RS 12.1, BAUCHI	17	27	157	184	196	37
36	RS 12.2, BORNO	-	-	-	-	-	-
37	RS 12.3, YOBE	25	24	105	129	212	43
TOTAL		607	805	2169	2974	4430	976

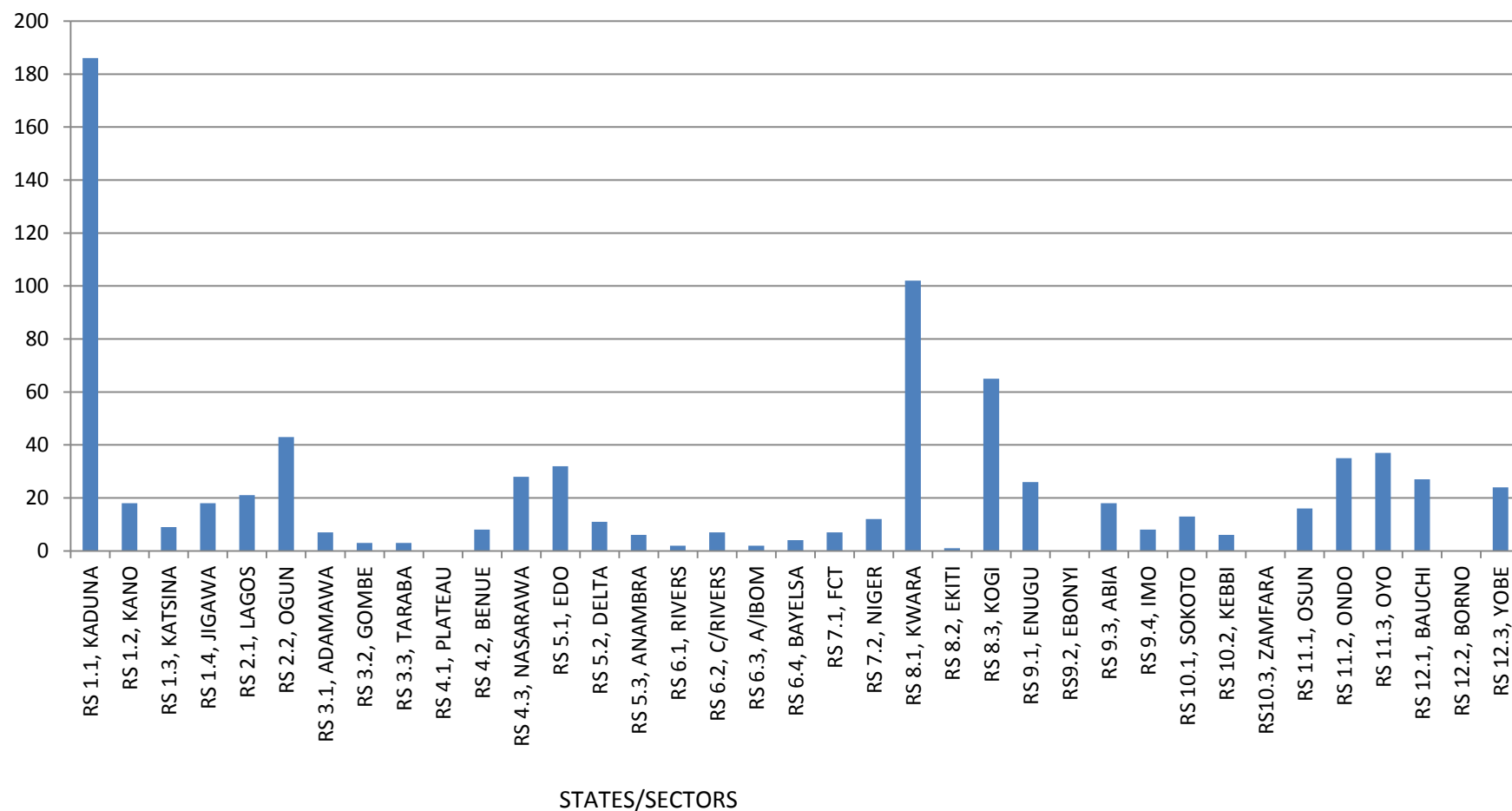
SOURCE: FRSC

FIGURE 2a: TOTAL RTC ON STATES BASIS, 2007



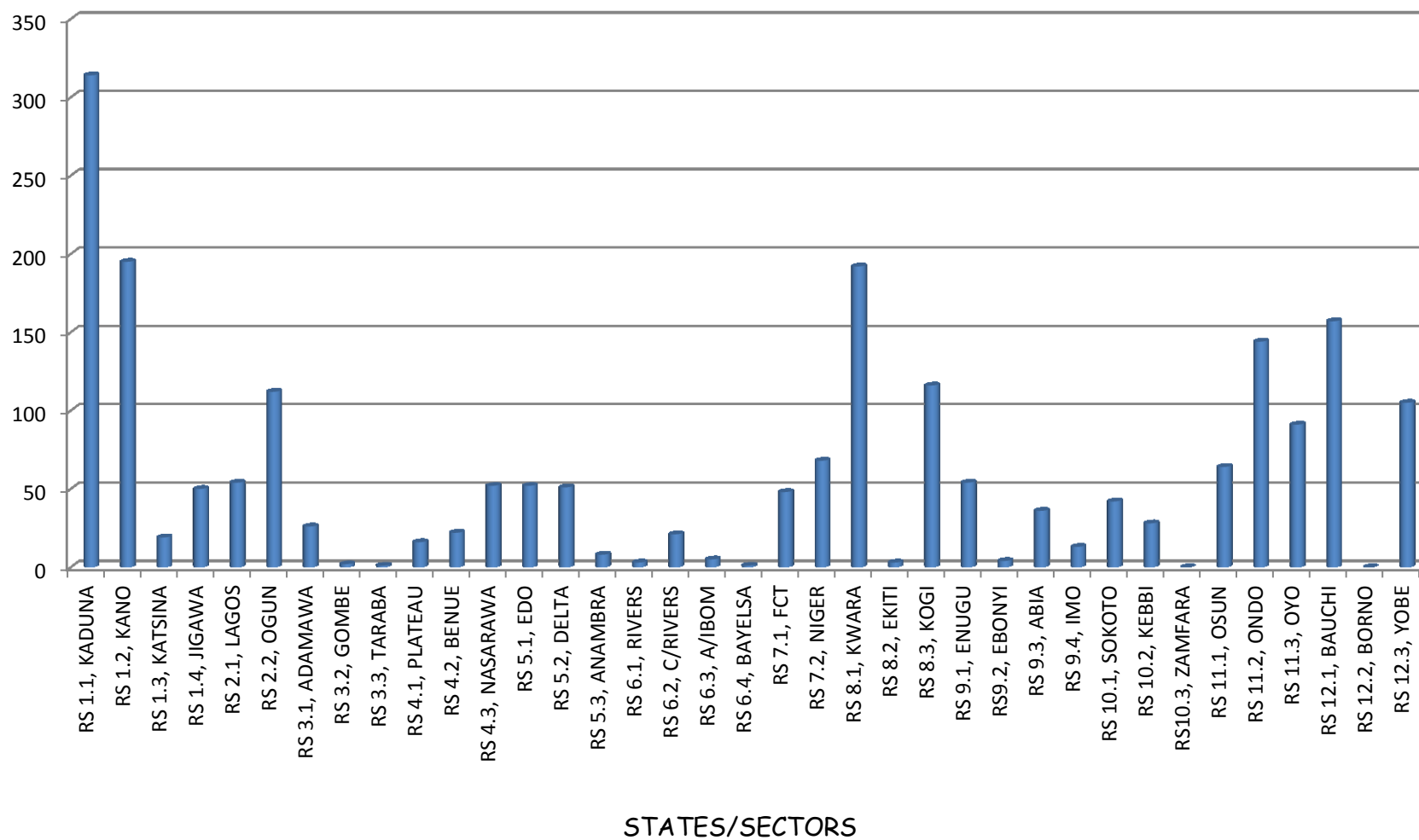
SOURCE: FRSC

FIGURE 2b: TOTAL KILLED ON STATES BASIS, 2007.



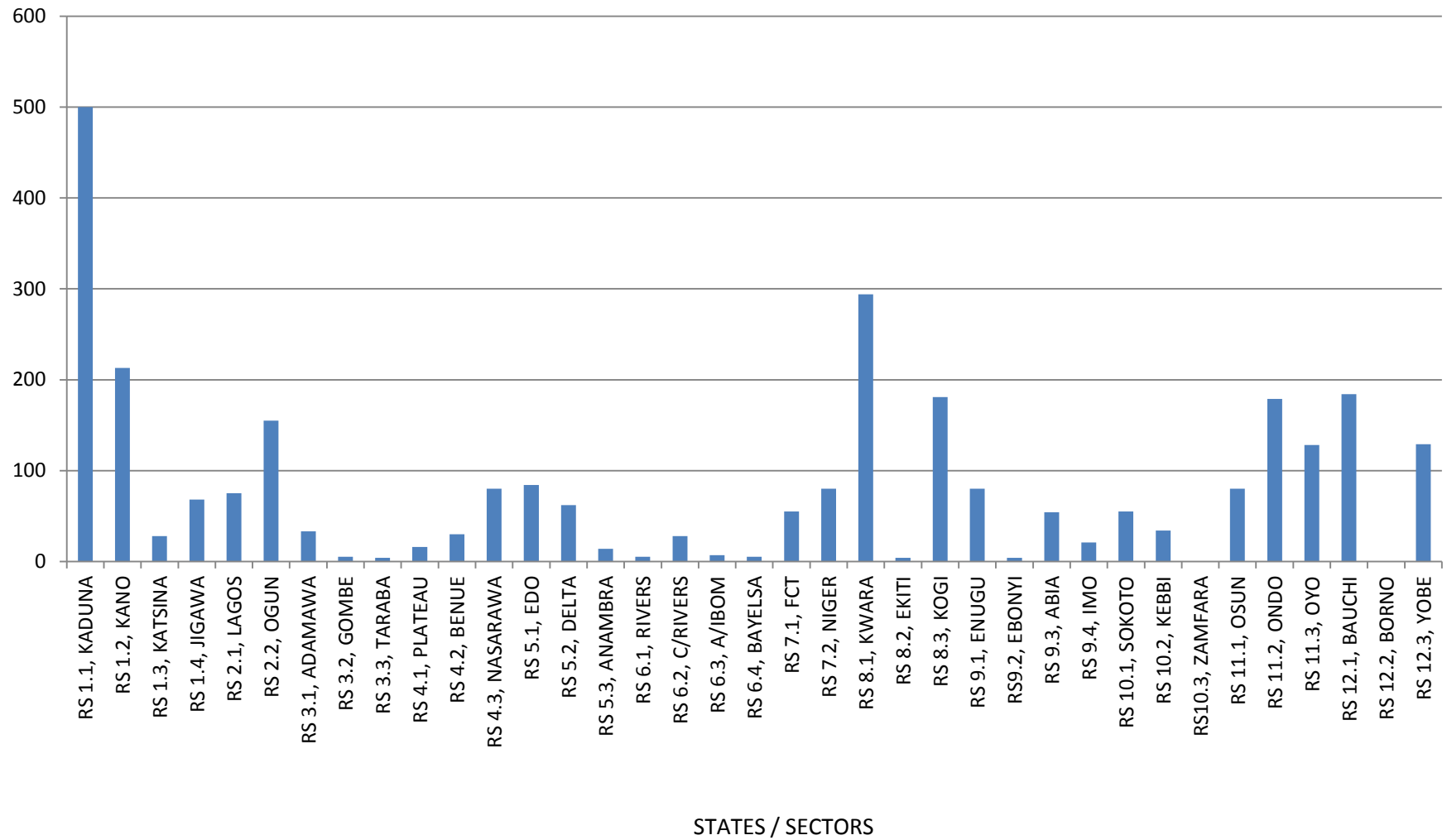
SOURCE: FRSC

FIGURE 2c: TOTAL INJURED ON STATES BASIS, 2007.



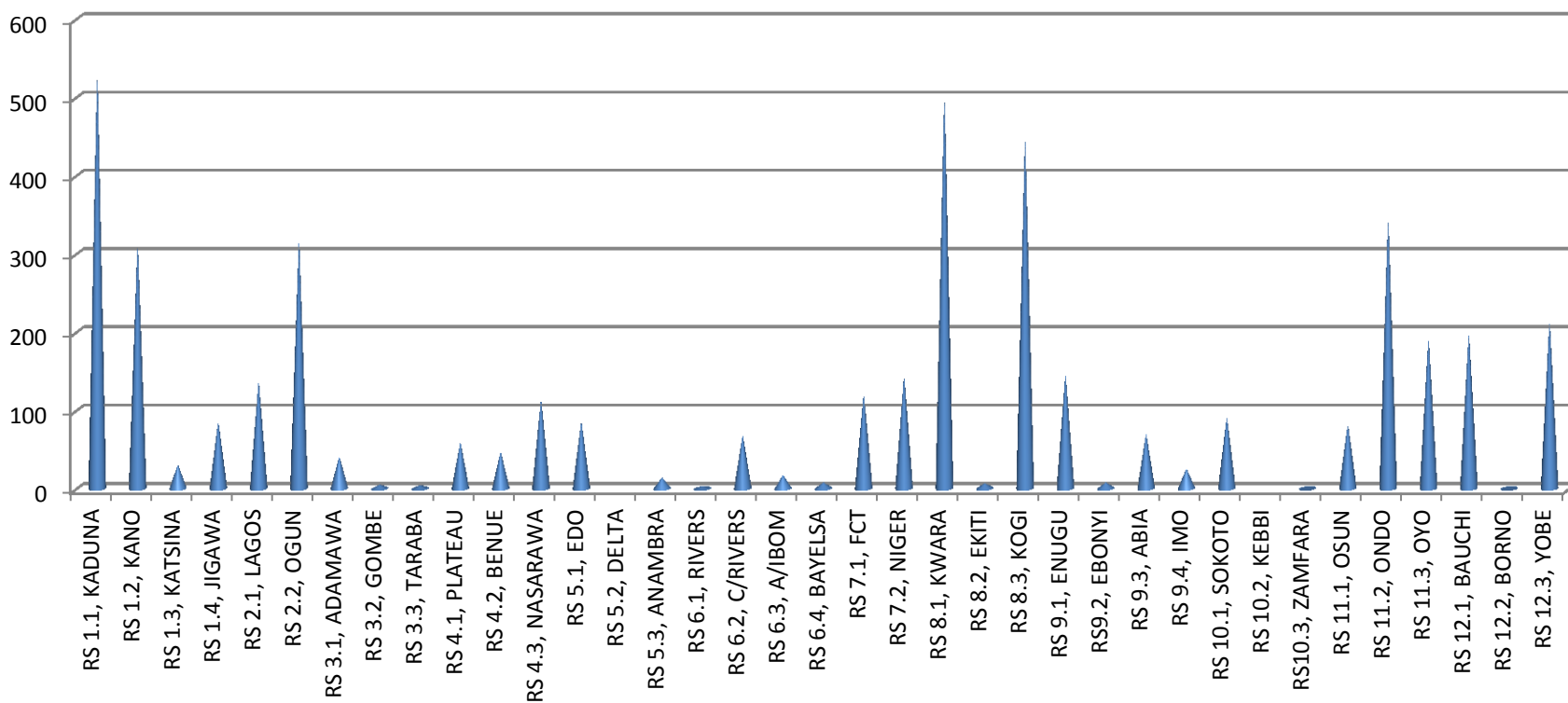
SOURCE : FRSC

FIGURE 2d: TOTAL CASUALTIES ON STATES BASIS, 2007.



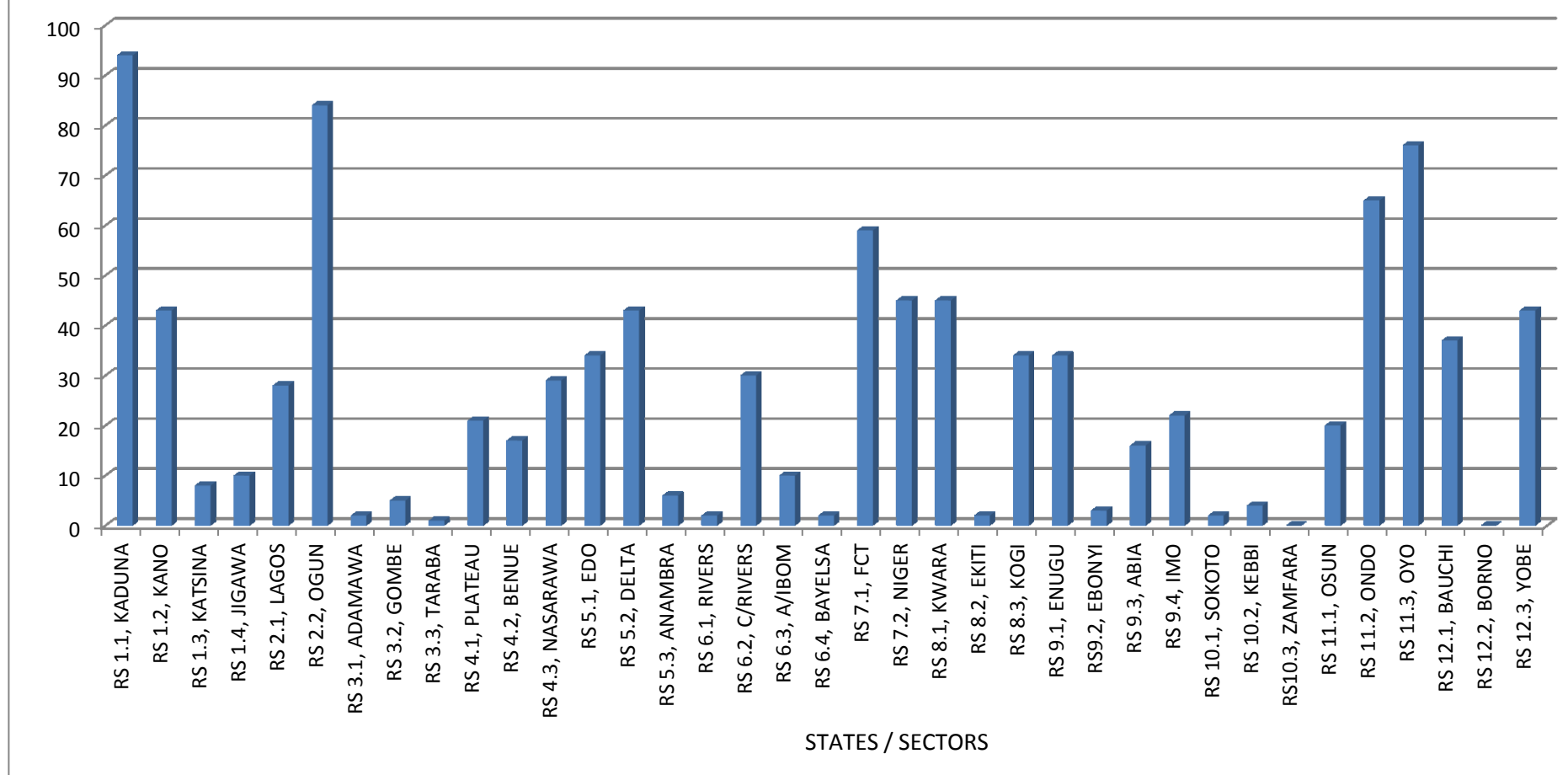
SOURCE: FRSC

FIGURE 2e: TOTAL PERSONS INVOLVED ON STATES BASIS, 2007



SOURCE: FRSC

FIGURE 2f: TOTAL VEHICLES ON STATES BASIS, 2007.



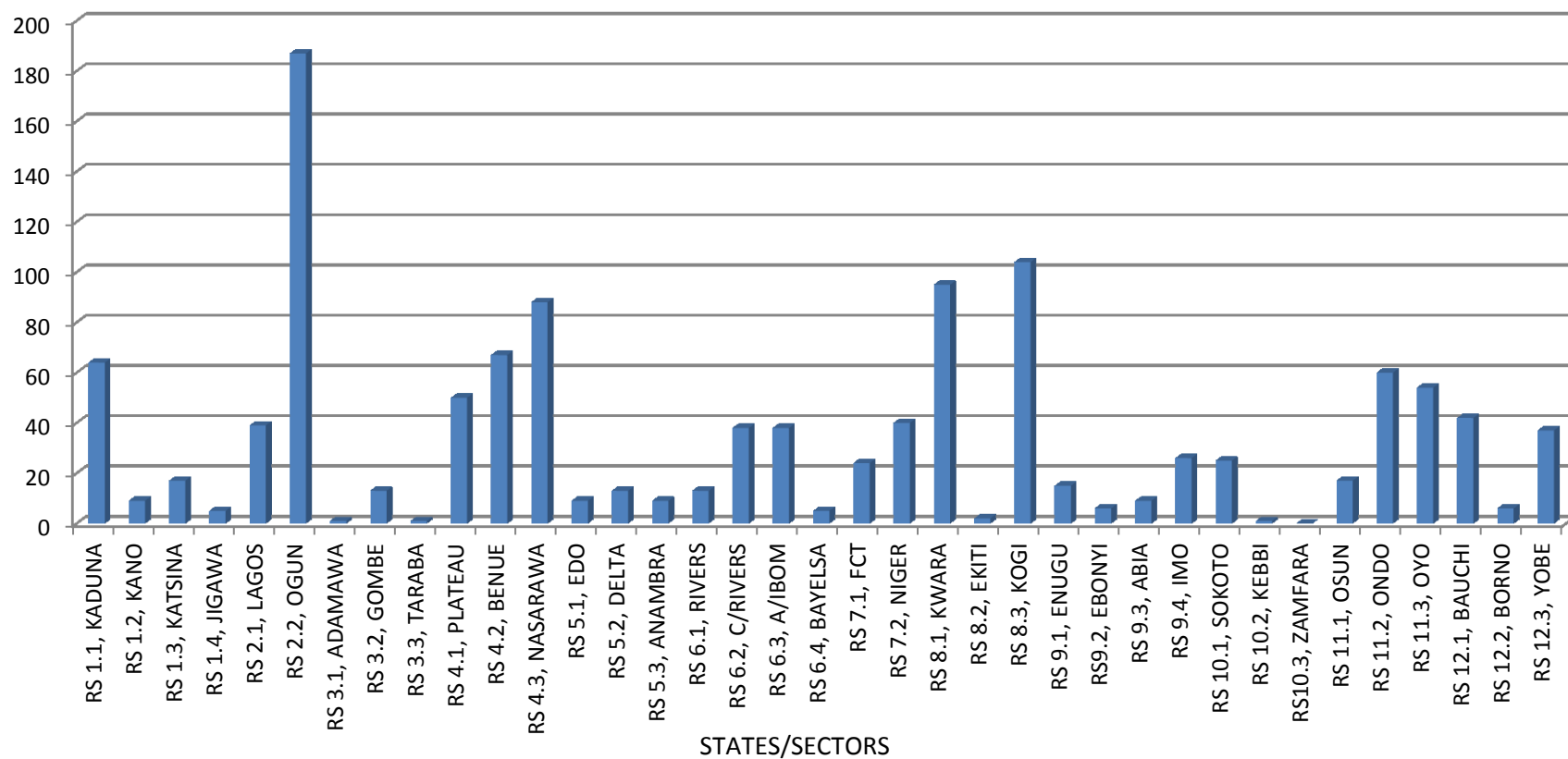
SOURCE: FRSC

TABLE 3: 2008 RTC INVOLVING TANKERS/TRAILERS.

<i>S/N</i>	<i>SECTOR</i>	<i>TOTAL RTC</i>	<i>NO KILLED</i>	<i>NO INJURED</i>	<i>TOTAL CASUALTY</i>	<i>NO. OF PERSONS INVOLVED</i>	<i>TOTAL NUMBER OF VEH. INVOLVED</i>
1	RS 1.1, KADUNA	64	55	248	303	528	98
2	RS 1.2, KANO	9	7	44	51	60	9
3	RS 1.3, KATSINA	17	19	44	63	60	22
4	RS 1.4, JIGAWA	5	20	53	73	77	6
5	RS 2.1, LAGOS	39	32	78	110	184	47
6	RS 2.2, OGUN	187	57	339	396	406	205
7	RS 3.1, ADAMAWA	1	1	11	12	20	1
8	RS 3.2, GOMBE	13	7	74	81	93	16
9	RS 3.3, TARABA	1	1	2	3	-	2
10	RS 4.1, PLATEAU	50	17	75	92	109	73
11	RS 4.2, BENUE	67	58	124	182	216	80
12	RS 4.3, NASARAWA	88	84	421	505	563	111
13	RS 5.1, EDO	9	1	8	9	46	12
14	RS 5.2, DELTA	13	1	15	16	-	17
15	RS 5.3, ANAMBRA	9	6	13	19	48	10
16	RS 6.1, RIVERS	13	9	10	19	9	15
17	RS 6.2, C/RIVERS	38	26	92	118	181	64
18	RS 6.3, A/IBOM	38	15	57	72	143	66
19	RS 6.4, BAYELSA	5	10	12	22	26	7
20	RS 7.1, FCT	24	17	92	109	92	40
21	RS 7.2, NIGER	40	49	113	162	208	53
22	RS 8.1, KWARA	95	168	304	472	866	110
23	RS 8.2, EKITI	2	1	17	18	18	2
24	RS 8.3, KOGI	104	172	452	624	946	121
25	RS 9.1, ENUGU	15	7	88	95	169	16
26	RS 9.2, EBONYI	6	2	123	125	20	9
27	RS 9.3, ABIA	9	7	45	52	75	16
28	RS 9.4, IMO	26	13	70	83	152	44
29	RS 10.1, SOKOTO	25	83	81	164	207	34
30	RS 10.2, KEBBI	1	-	-	0	-	2
31	RS 10.3, ZAMFARA	-	-	-	0	-	0
32	RS 11.1, OSUN	17	17	44	61	96	31
33	RS 11.2, ONDO	60	57	95	152	374	81
34	RS 11.3, OYO	54	83	360	443	338	86
35	RS 12.1, BAUCHI	42	39	121	160	292	75
36	RS 12.2, BORNO	6	23	7	30	17	14
37	RS 12.3, YOBE	37	57	159	216	360	60
TOTAL		1229	1221	3891	5112	6999	1655

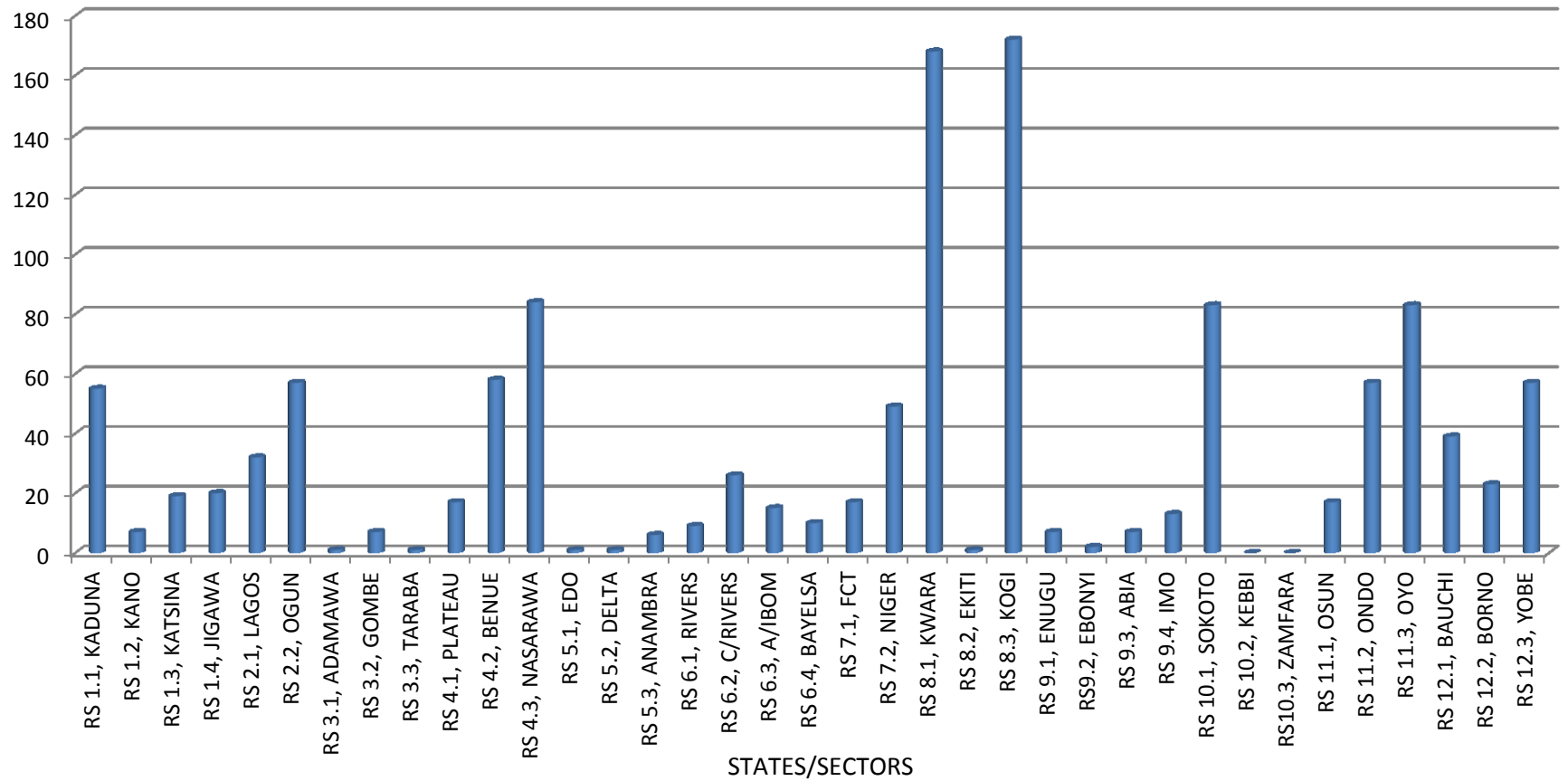
Source : FRSC

FIGURE 3a: TOTAL RTC ON STATES BASIS, 2008



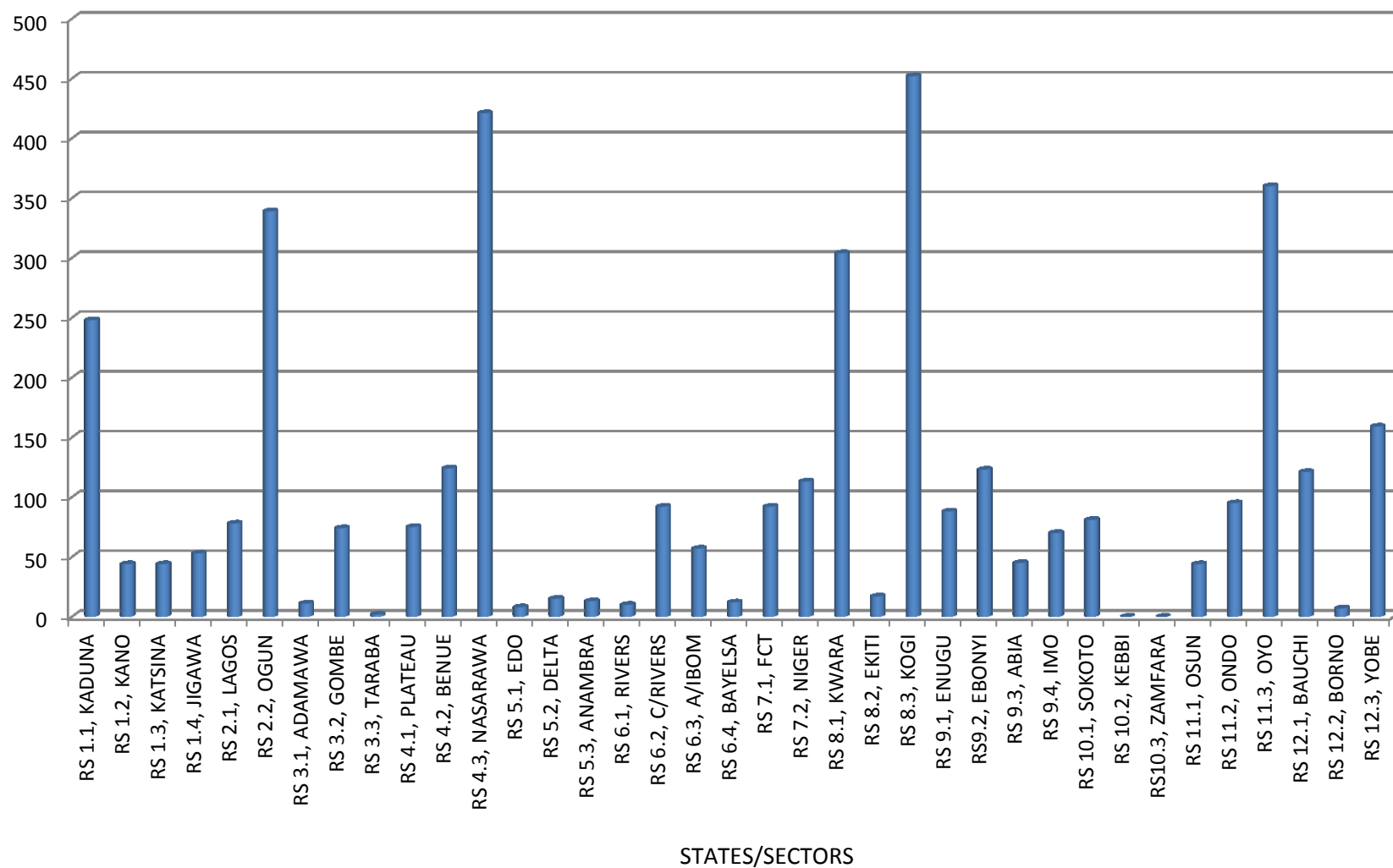
SOURCE: FRSC

FIGURE 3b: TOTAL KILLED ON STATES BASIS, 2008



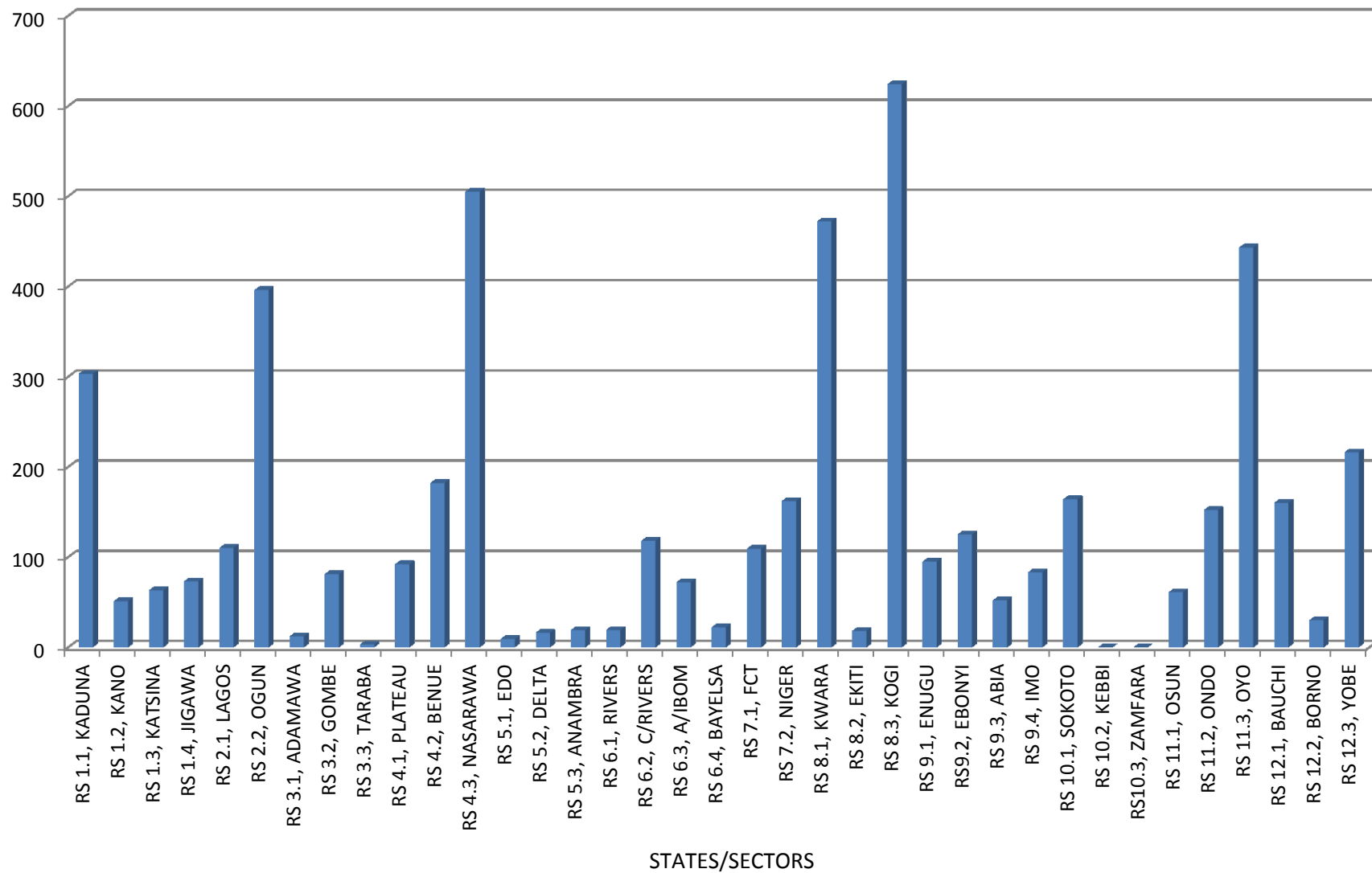
SOURCE: FRSC

FIGURE 3c: TOTAL INJURED ON STATES BASIS, 2008



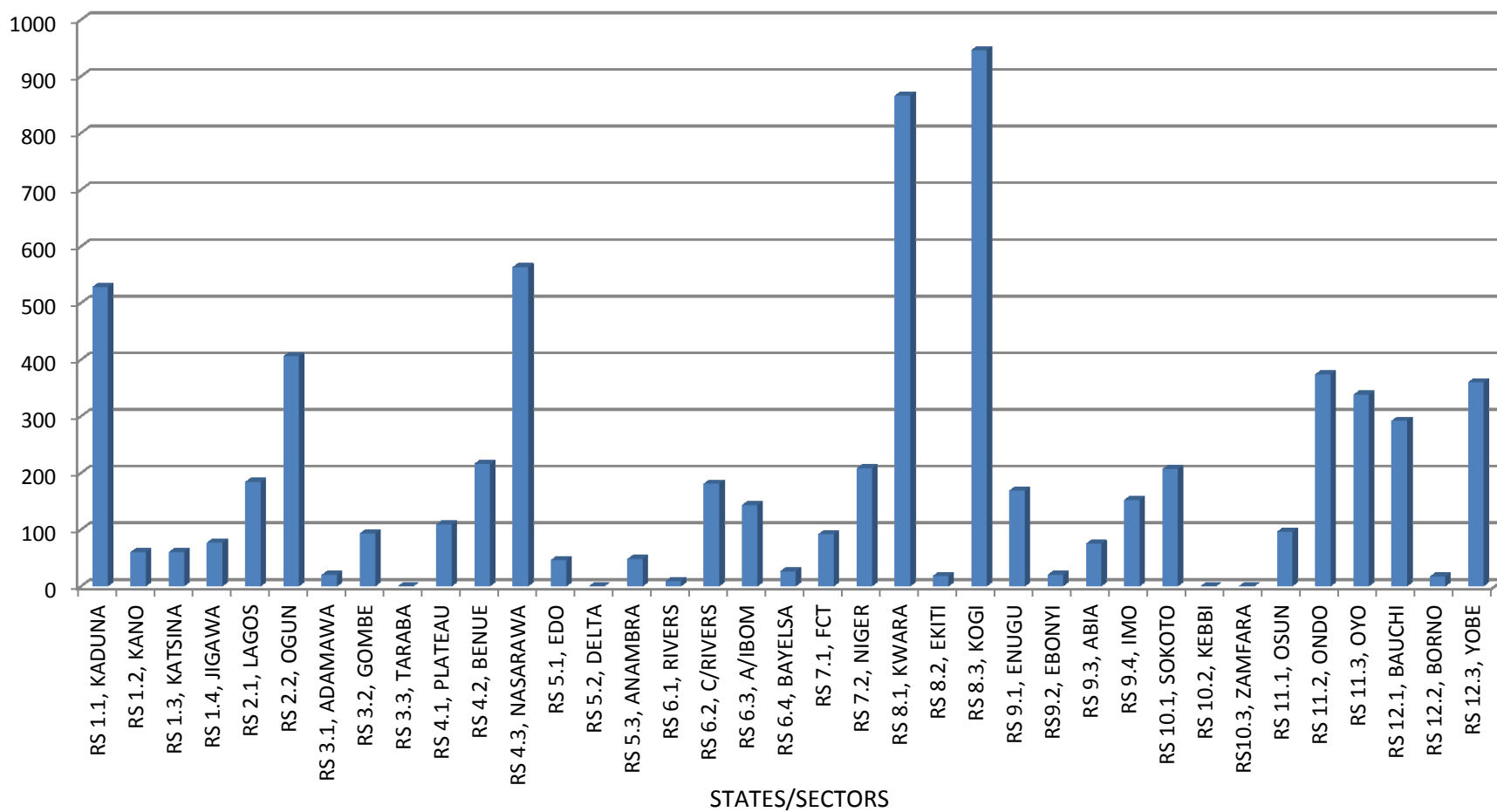
SOURCE: FRSC

FIGURE 3d: TOTAL CASUALTIES ON STATES BASIS, 2008



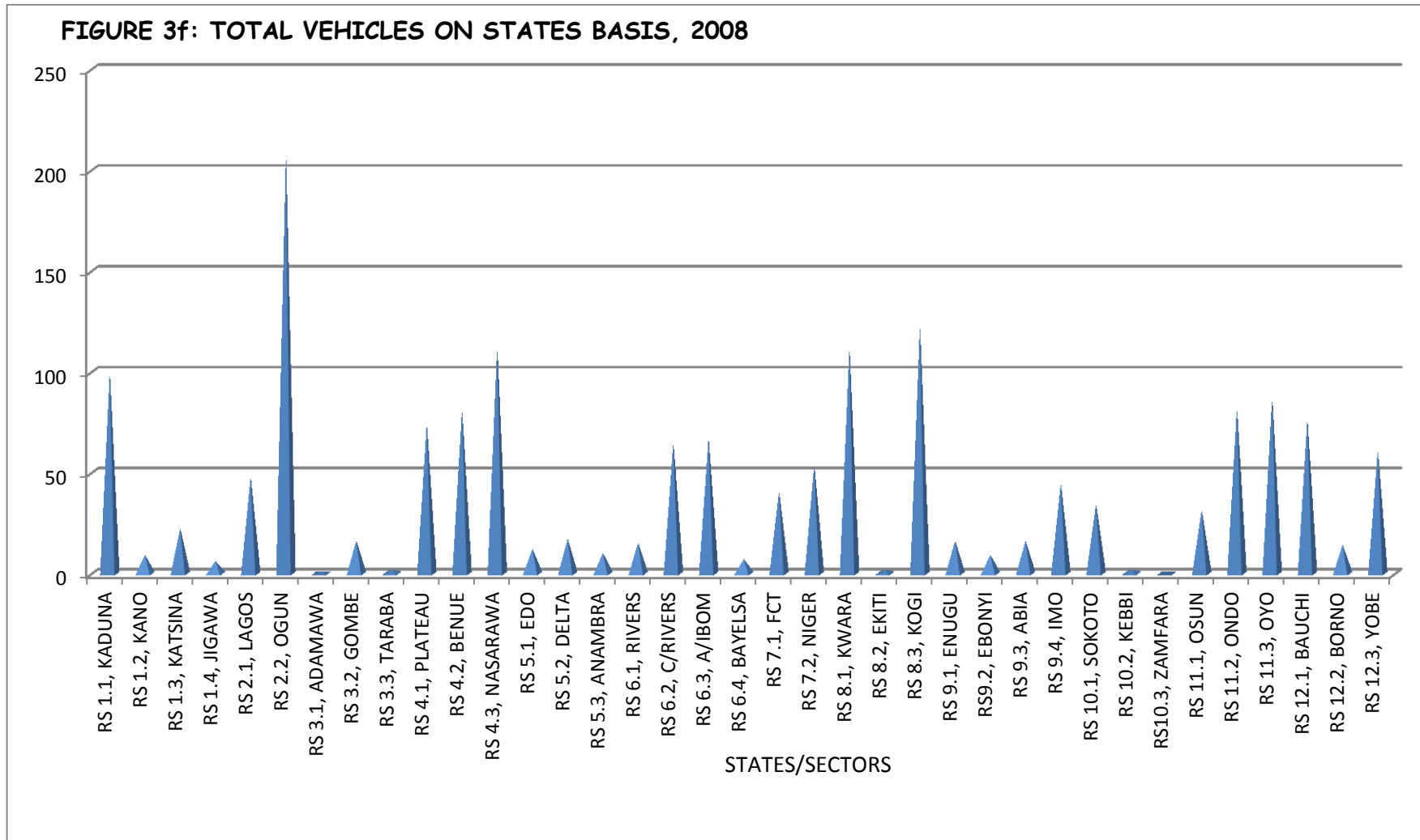
SOURCE: FRSC

FIGURE 3e: TOTAL PERSONS ON STATES BASIS 2008



SOURCE: FRSC

FIGURE 3f: TOTAL VEHICLES ON STATES BASIS, 2008



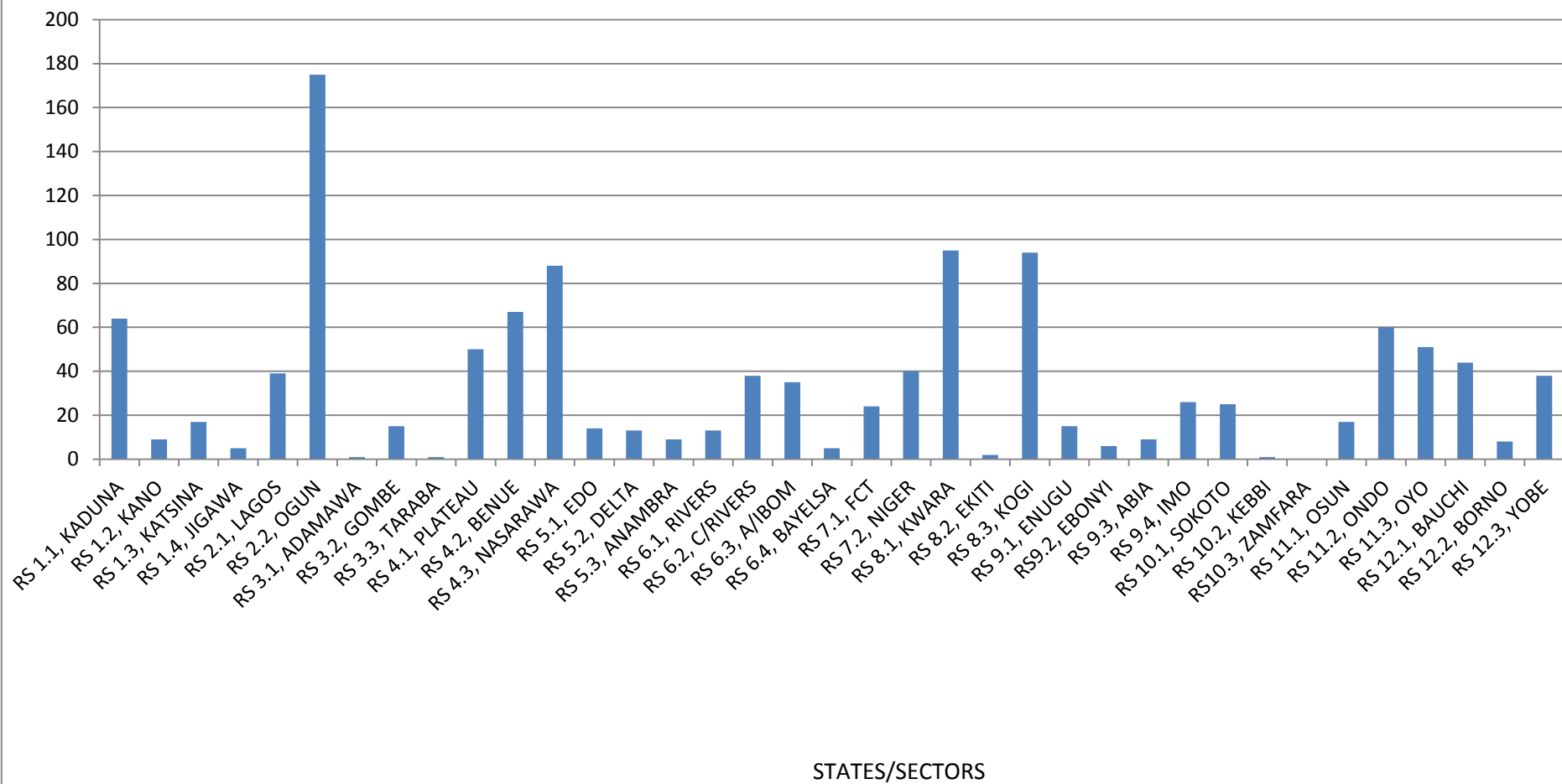
SOURCE: FRSC

TABLE 4: 2009 RTC INVOLVING TANKERS/TRAILERS.

<i>S/N</i>	<i>SECTOR</i>	<i>TOTAL RTC</i>	<i>NO KILLED</i>	<i>NO INJURED</i>	<i>TOTAL CASUALTY</i>	<i>NO. OF PERSONS INVOLVED</i>	<i>TOTAL NUMBER OF VEH. INVOLVED</i>
1	RS 1.1, KADUNA	64	80	242	322	397	158
2	RS 1.2, KANO	9	7	44	51	77	9
3	RS 1.3, KATSINA	17	19	44	63	60	22
4	RS 1.4, JIGAWA	5	20	53	73	77	6
5	RS 2.1, LAGOS	39	32	78	110	184	47
6	RS 2.2, OGUN	175	57	339	396	1090	205
7	RS 3.1, ADAMAWA	1	1	11	12	20	1
8	RS 3.2, GOMBE	15	7	74	81	126	16
9	RS 3.3, TARABA	1	1	2	3	-	2
10	RS 4.1, PLATEAU	50	17	75	92	208	73
11	RS 4.2, BENUE	67	48	124	172	296	80
12	RS 4.3, NASARAWA	88	74	421	495	746	111
13	RS 5.1, EDO	14	1	8	9	46	12
14	RS 5.2, DELTA	13	1	15	16	-	17
15	RS 5.3, ANAMBRA	9	6	13	19	48	10
16	RS 6.1, RIVERS	13	9	10	19	9	15
17	RS 6.2, C/RIVERS	38	26	92	118	181	64
18	RS 6.3, A/IBOM	35	15	57	72	143	66
19	RS 6.4, BAYELSA	5	10	12	22	26	7
20	RS 7.1, FCT	24	17	92	109	92	40
21	RS 7.2, NIGER	40	39	113	152	208	53
22	RS 8.1, KWARA	95	104	304	408	866	110
23	RS 8.2, EKITI	2	1	17	18	18	2
24	RS 8.3, KOGI	94	147	352	499	946	121
25	RS 9.1, ENUGU	15	25	67	92	229	47
26	RS9.2, EBONYI	6	2	123	125	20	9
27	RS 9.3, ABIA	9	7	45	52	75	16
28	RS 9.4, IMO	26	13	70	83	152	44
29	RS 10.1, SOKOTO	25	63	81	144	207	34
30	RS 10.2, KEBBI	1	-	-	0	-	2
31	RS10.3, ZAMFARA	-	-	-	0	-	0
32	RS 11.1, OSUN	17	17	44	61	96	31
33	RS 11.2, ONDO	60	27	95	122	374	102
34	RS 11.3, OYO	51	83	310	393	338	86
35	RS 12.1, BAUCHI	44	39	121	160	292	75
36	RS 12.2, BORNO	8	23	7	30	17	14
37	RS 12.3, YOBE	37	47	159	206	360	60
TOTAL		1213	1085	3714	4799	8024	1767

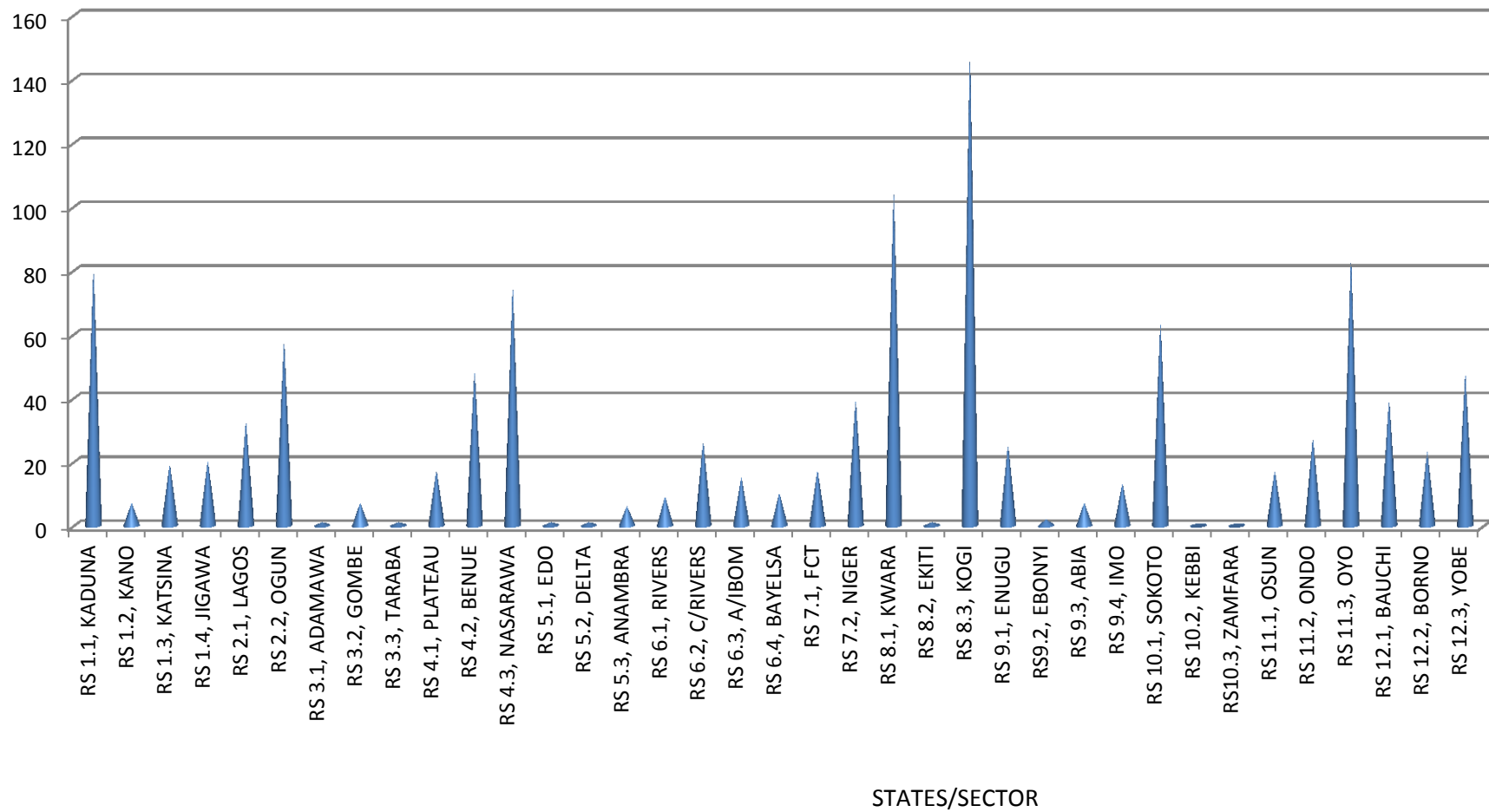
SOURCE: FRSC

FIGURE 4a: TOTAL RTC ON STATES BASIS, 2009



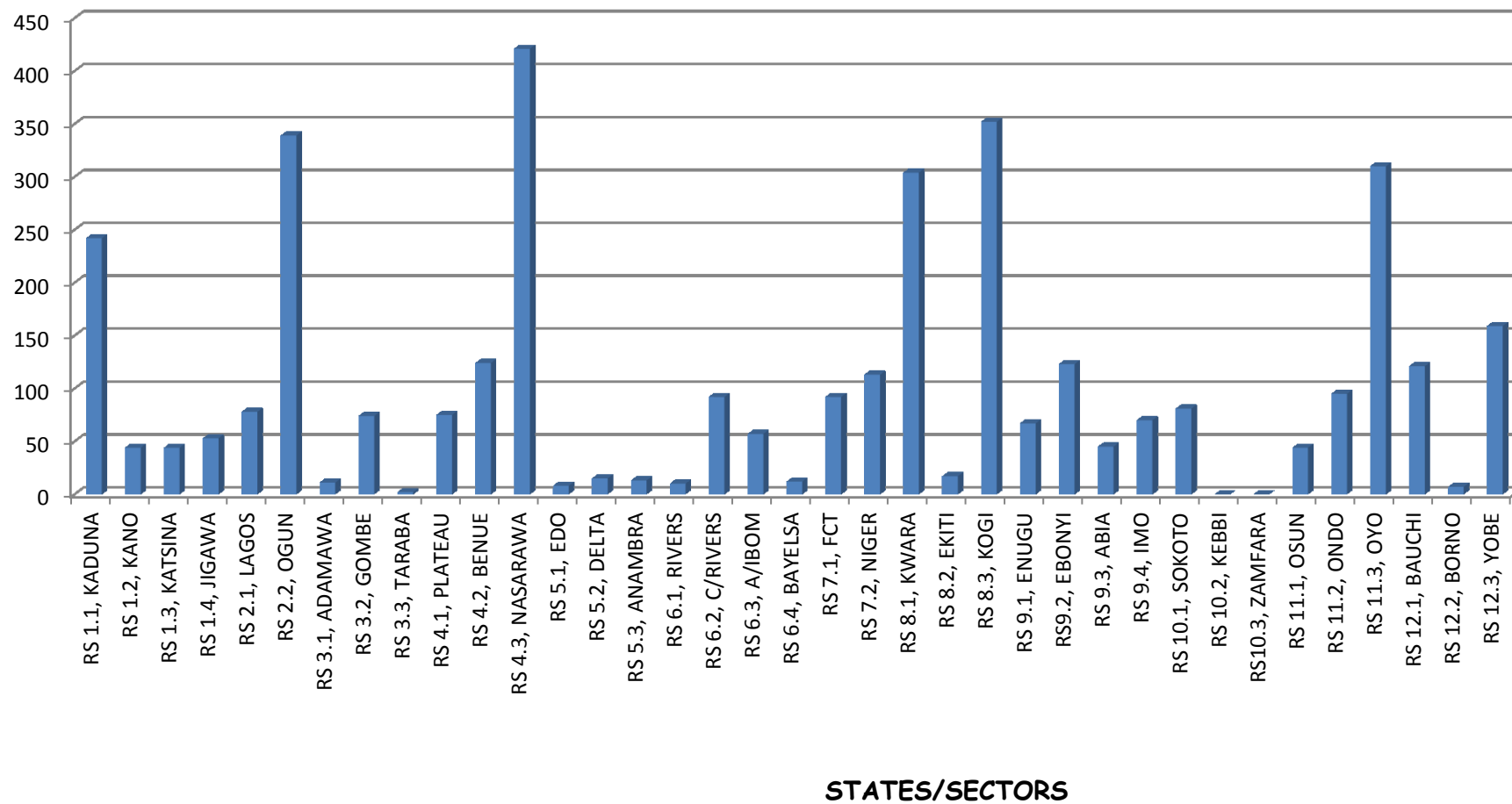
SOURCE: FRSC

FIGURE 4b: TOTAL KILLED ON STATES BASIS, 2009.



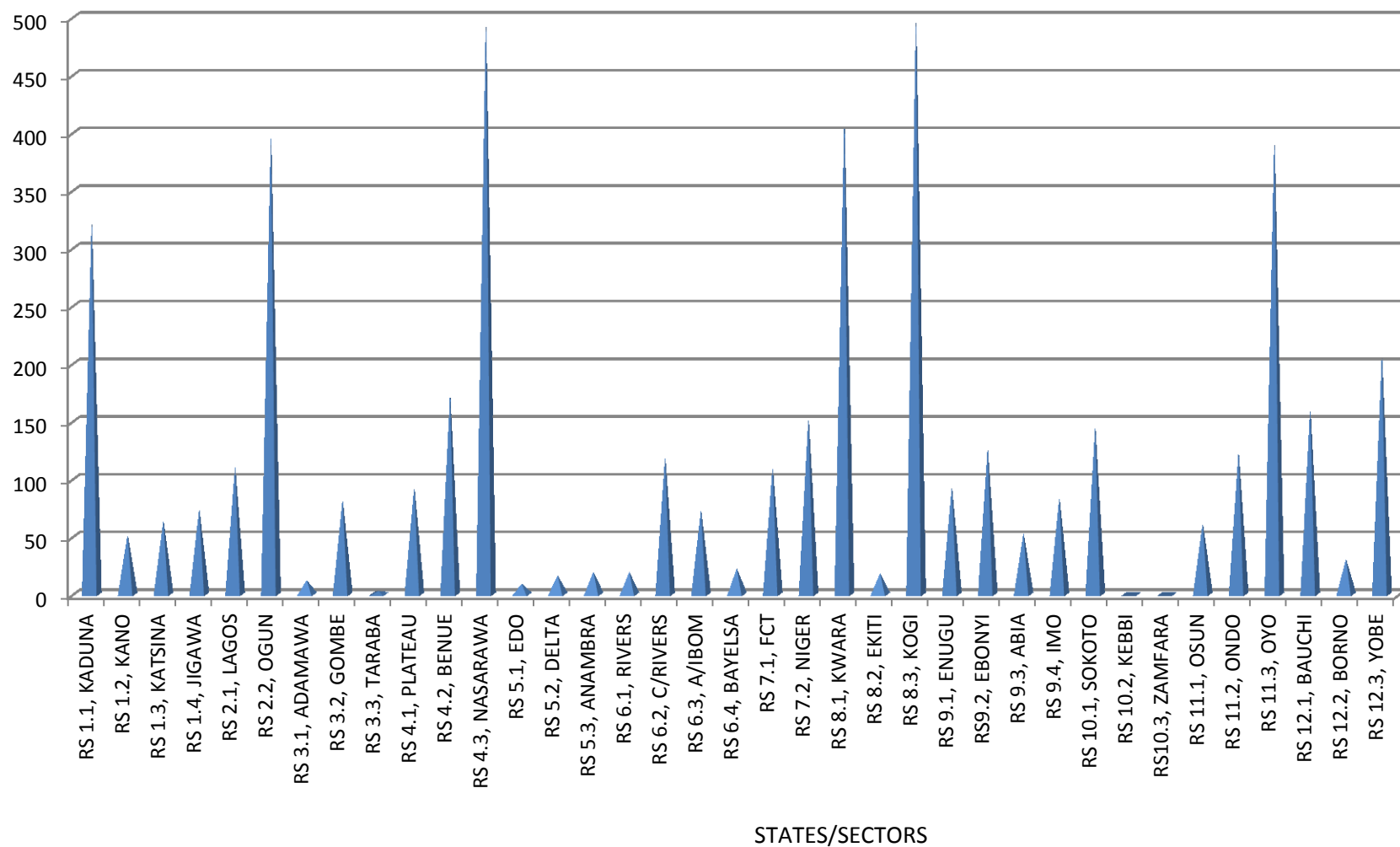
SOURCE: FRSC

FIGURE 4c: TOTAL INJURED ON STATES BASIS, 2009



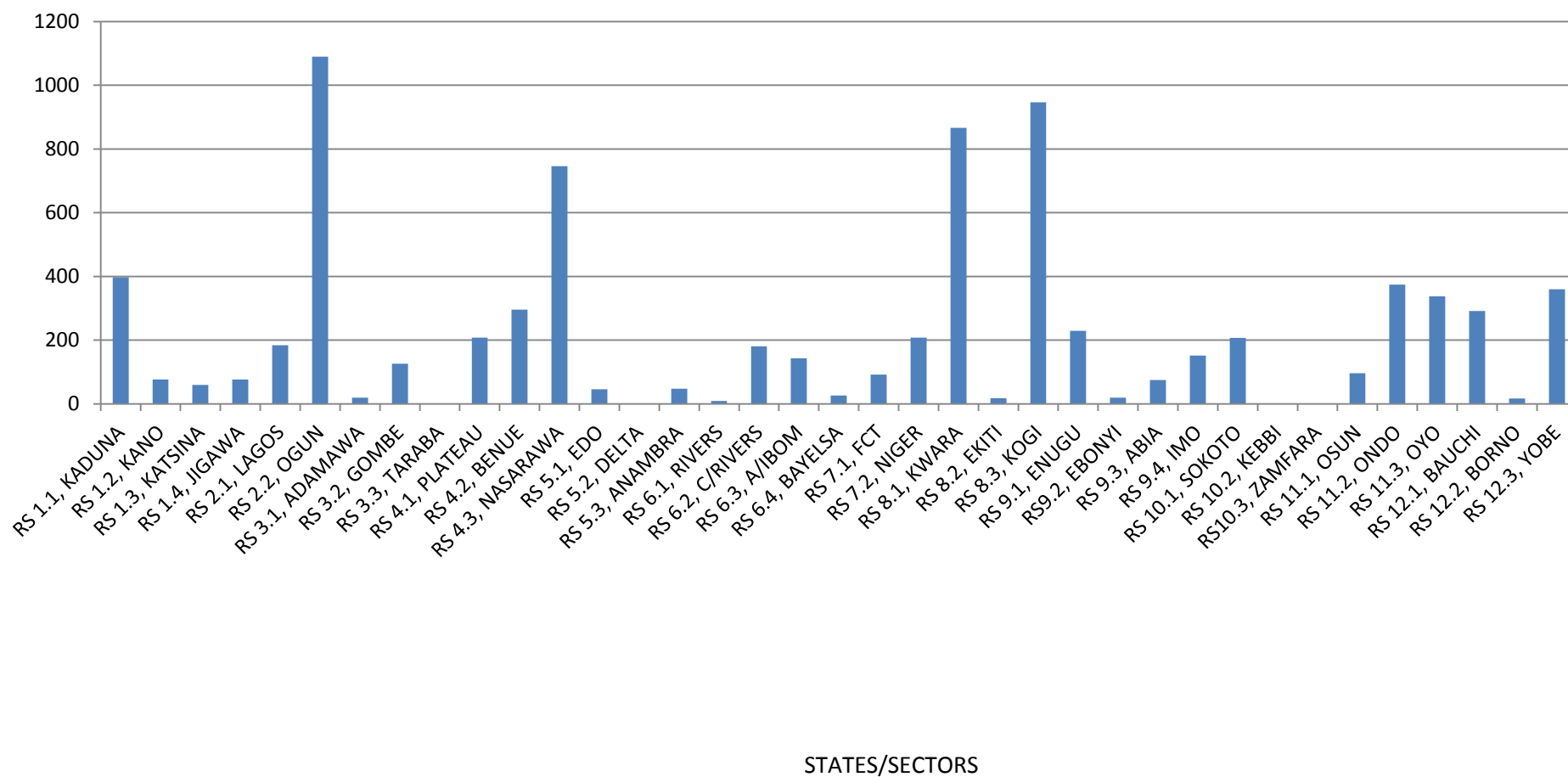
SOURCE: FRSC

FIGURE 4d: TOTAL CASUALTIES ON STATES BASIS, 2009



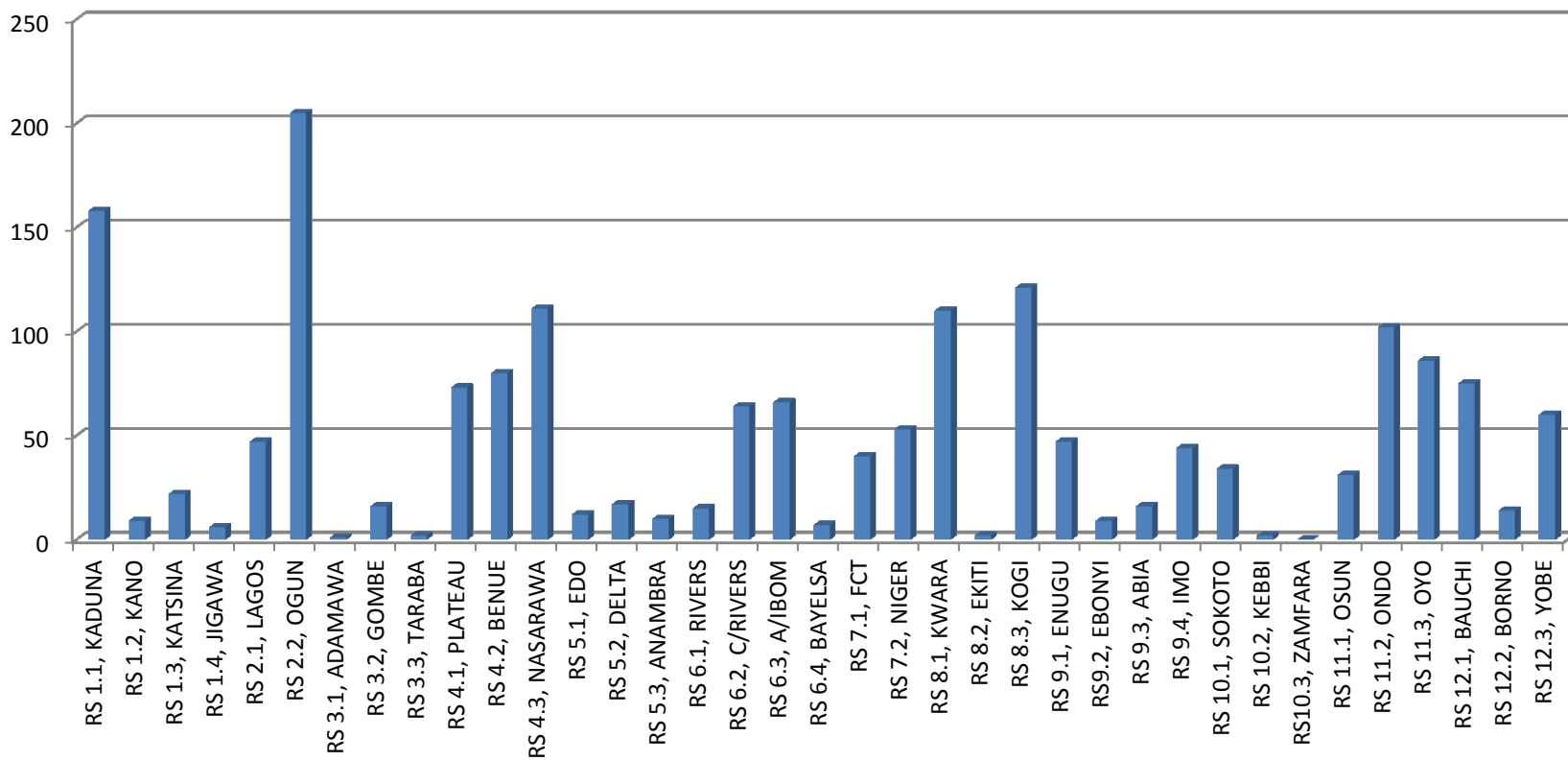
SOURCE: FRSC

FIGURE 4e: TOTAL PERSONS ON STATES BASIS, 2009



SOURCE: FRSC

FIGURE 4f: TOTAL VEHICLES ON STATES BASIS, 2009



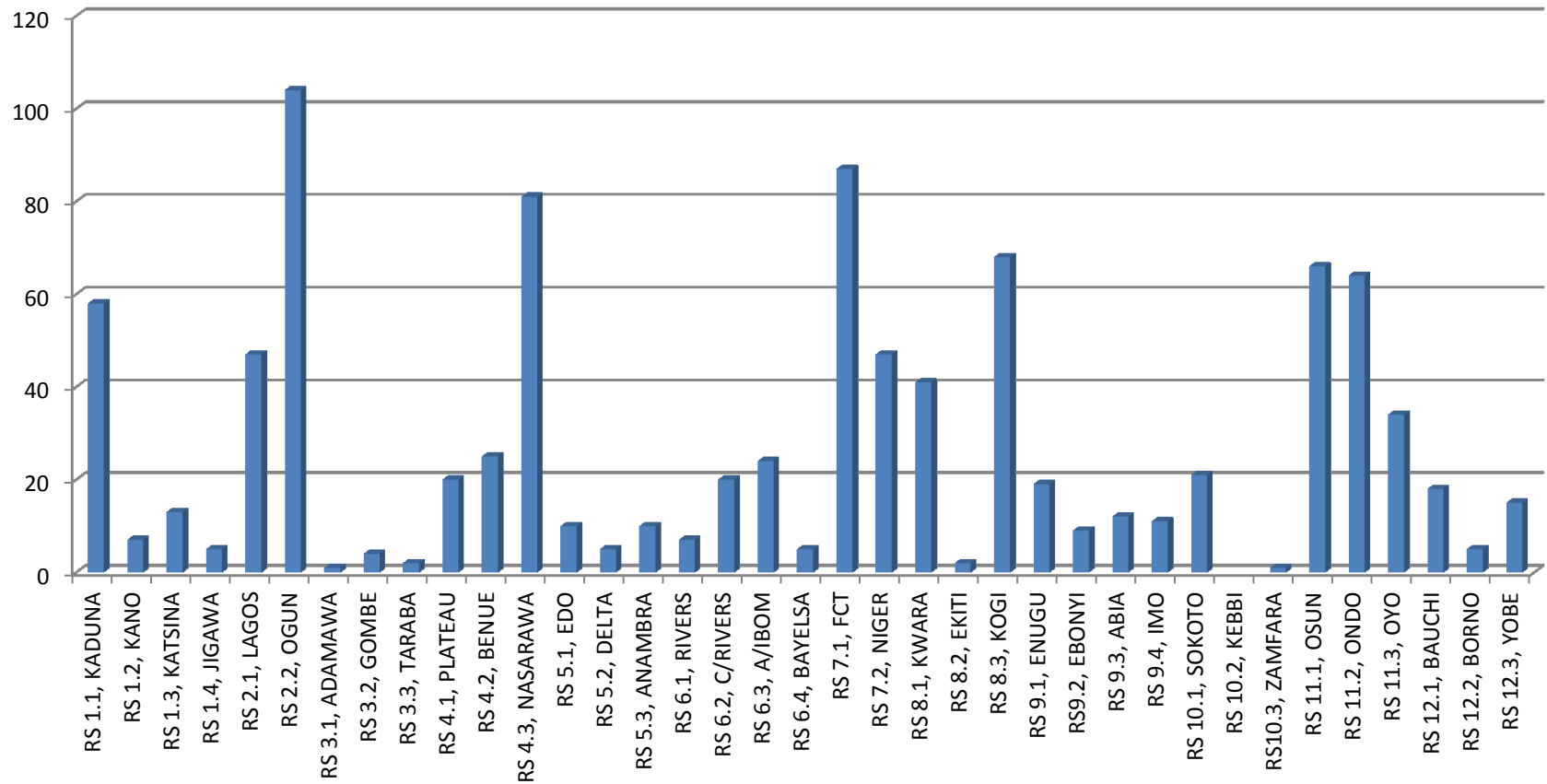
SOURCE: FRSC

TABLE 5: 2010 RTC INVOLVING TANKERS/TRAILERS.

<i>S/N</i>	<i>SECTOR</i>	<i>TOTAL RTC</i>	<i>NO KILLED</i>	<i>NO INJURED</i>	<i>TOTAL CASUALTY</i>	<i>NO. OF PERSONS INVOLVED</i>	<i>TOTAL NUMBER OF VEH. INVOLVED</i>
1	RS 1.1, KADUNA	58	99	364	463	587	147
2	RS 1.2, KANO	7	9	23	32	53	10
3	RS 1.3, KATSINA	13	78	248	326	321	17
4	RS 1.4, JIGAWA	5	-	14	14	17	6
5	RS 2.1, LAGOS	47	53	159	212	482	67
6	RS 2.2, OGUN	104	31	160	191	622	135
7	RS 3.1, ADAMAWA	1	-	19	19	33	1
8	RS 3.2, GOMBE	4	14	17	31	35	5
9	RS 3.3, TARABA	2	5	2	7	9	3
10	RS 4.1, PLATEAU	20	16	75	91	324	33
11	RS 4.2, BENUE	25	10	33	43	110	28
12	RS 4.3, NASARAWA	81	113	405	518	642	109
13	RS 5.1, EDO	10	3	24	27	101	13
14	RS 5.2, DELTA	5	1	3	4		8
15	RS 5.3, ANAMBRA	10	8	13	21	15	15
16	RS 6.1, RIVERS	7	21	15	36	30	8
17	RS 6.2, C/RIVERS	20	14	23	37	82	41
18	RS 6.3, A/IBOM	24	11	28	39	46	33
19	RS 6.4, BAYELSA	5	-	7	7	46	5
20	RS 7.1, FCT	87	30	156	186	266	123
21	RS 7.2, NIGER	47	14	99	113	118	49
22	RS 8.1, KWARA	41	40	141	181	412	49
23	RS 8.2, EKITI	2	-	4	4	6	3
24	RS 8.3, KOGI	68	62	183	245	451	73
25	RS 9.1, ENUGU	19	12	56	68	79	22
26	RS 9.2, EBONYI	9	0	16	16	40	13
27	RS 9.3, ABIA	12	2	14	16	28	17
28	RS 9.4, IMO	11	16	26	42	55	22
29	RS 10.1, SOKOTO	21	69	189	258	333	21
30	RS 10.2, KEBBI		-	-	-	-	0
31	RS 10.3, ZAMFARA	1	2	6	-	-	1
32	RS 11.1, OSUN	66	63	214	277	499	86
33	RS 11.2, ONDO	64	73	171	244	551	138
34	RS 11.3, OYO	34	43	204	247	173	53
35	RS 12.1, BAUCHI	18	25	54	79	159	37
36	RS 12.2, BORNO	5	20	39	59	85	13
37	RS 12.3, YOBE	15	10	22	32	99	23
TOTAL		968	965	3220	4185	6909	1427

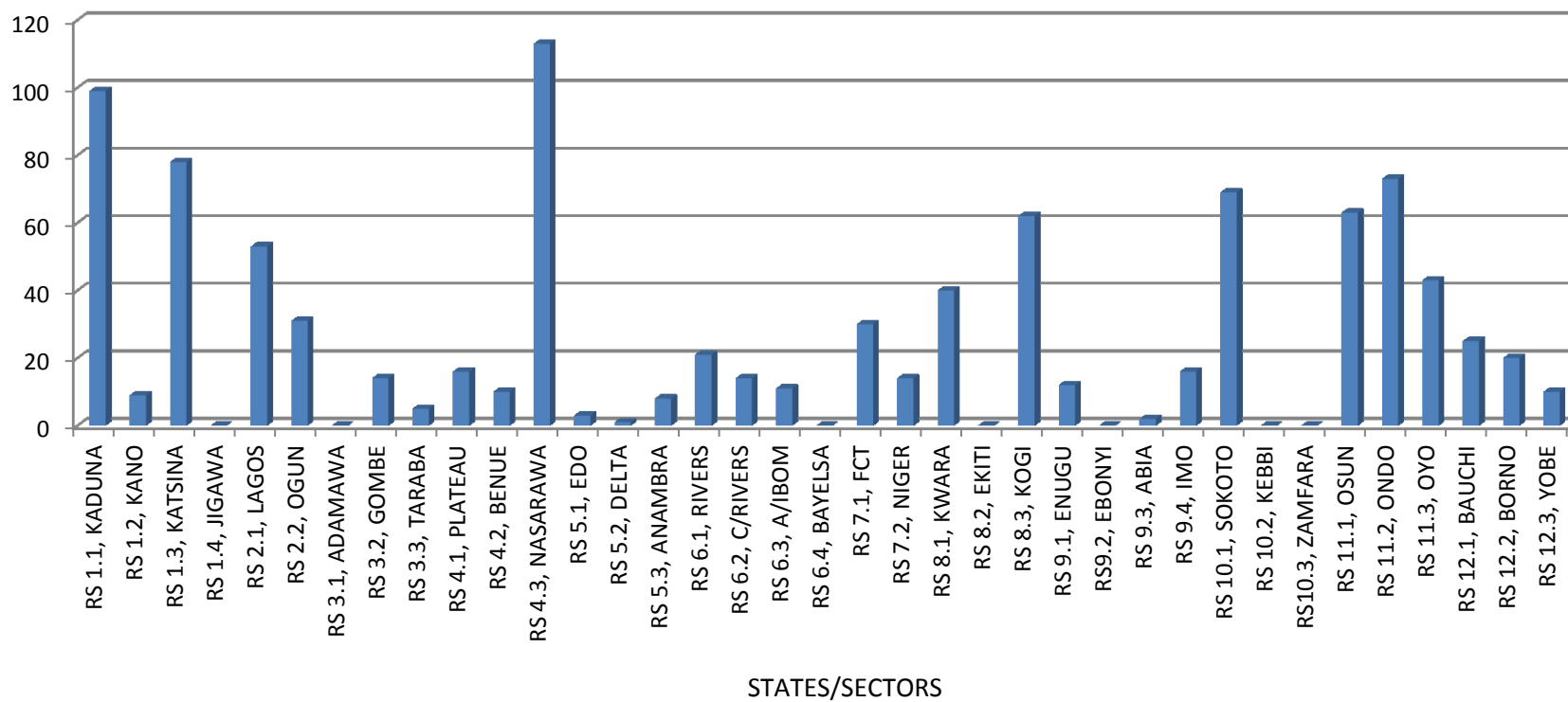
SOURCE: FRSC

FIGURE 5a: TOTAL RTC ON STATES BASIS, 2010



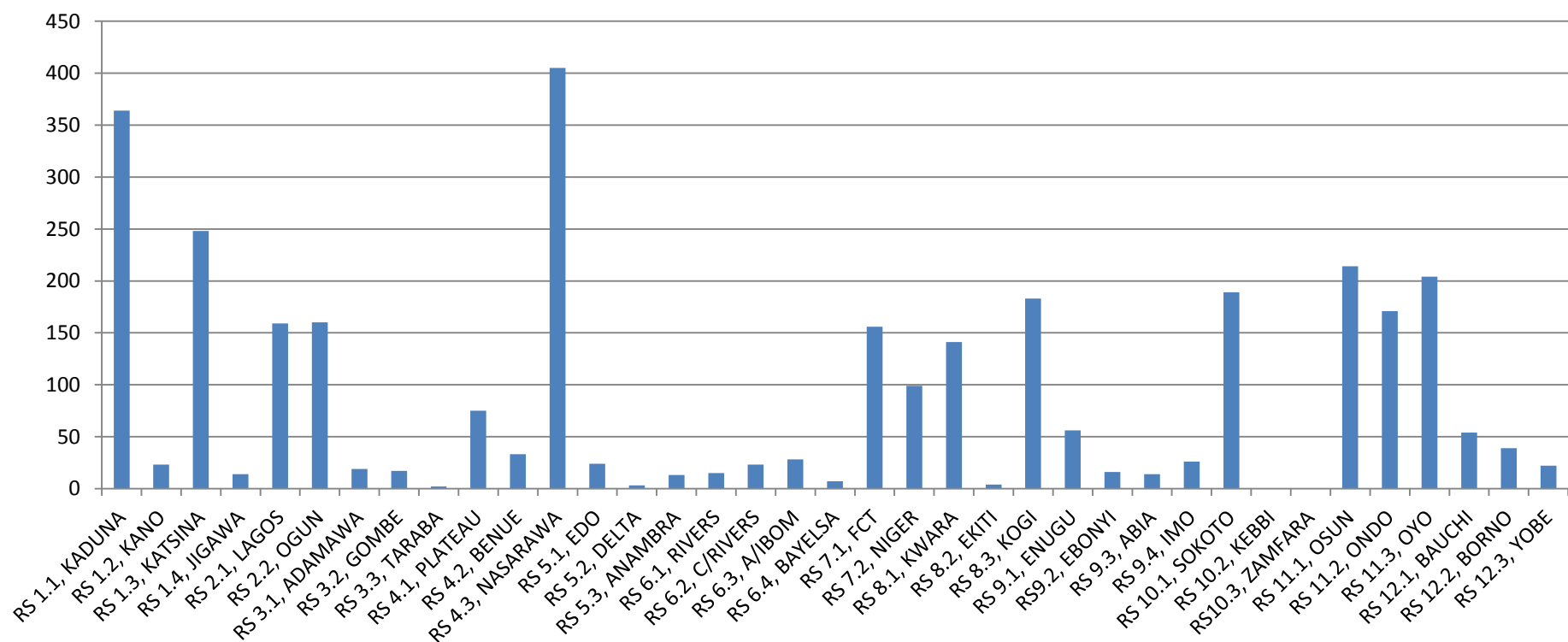
SOURCE: FRSC

FIGURE 5b: TOTAL KILLED ON STATES BASIS, 2010



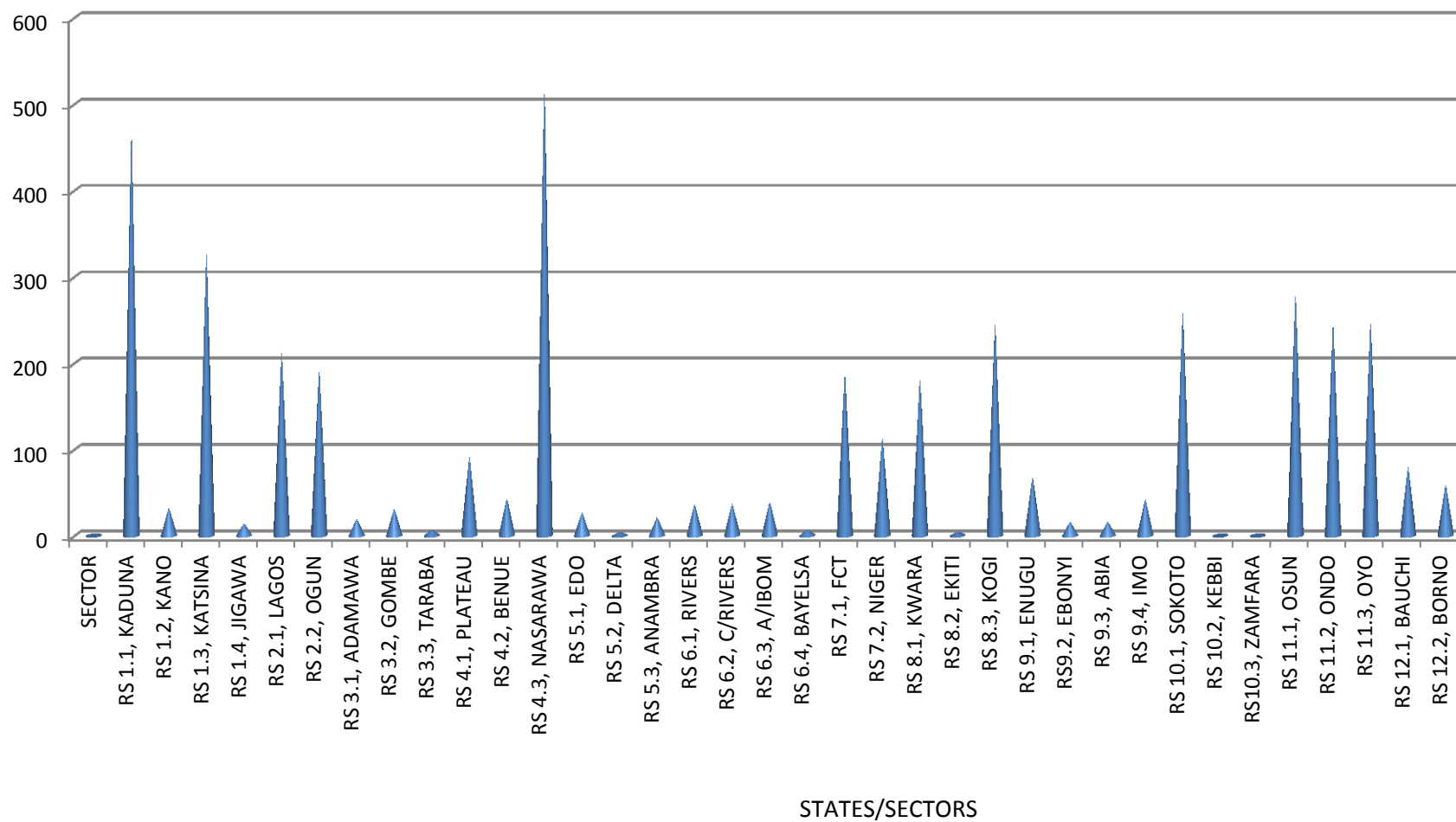
SOURCE: FRSC

FIGURE 5C: TOTAL INJURED ON STATES BASIS, 2010



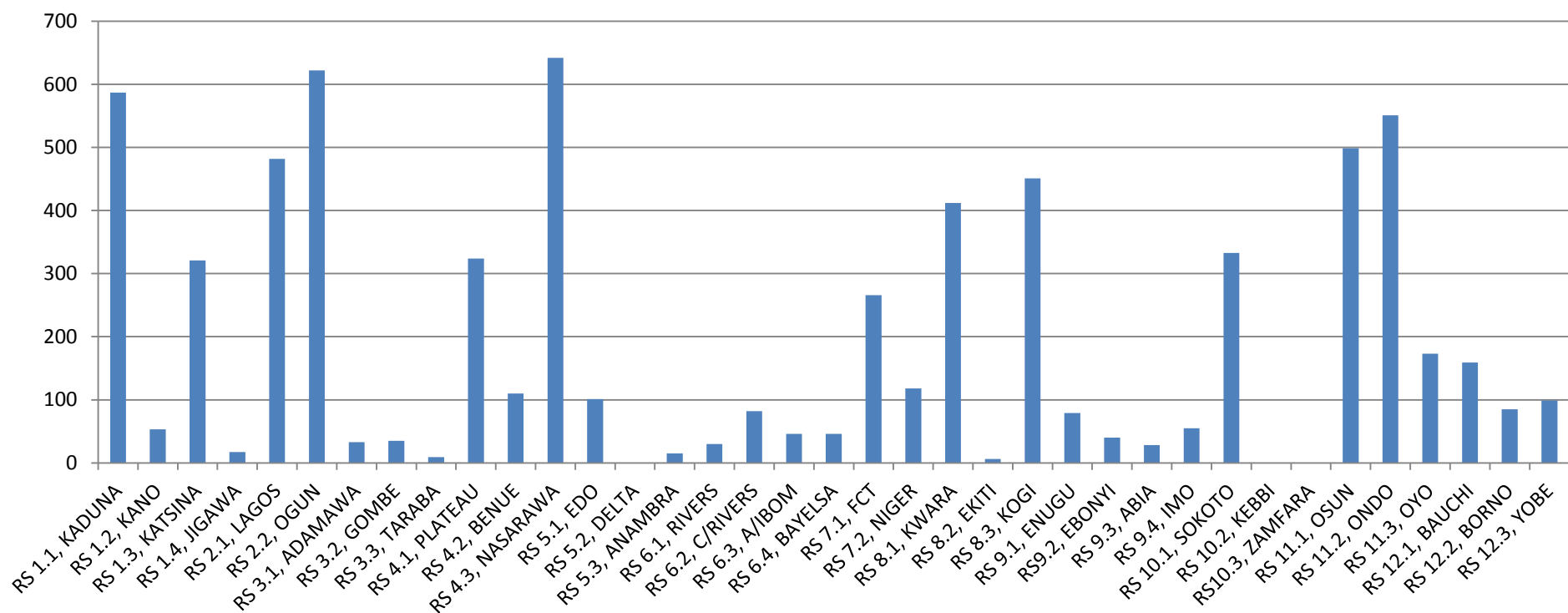
SOURCE: FRSC

FIGURE 5d: TOTAL CASUALTIES ON STATES BASIS, 2010



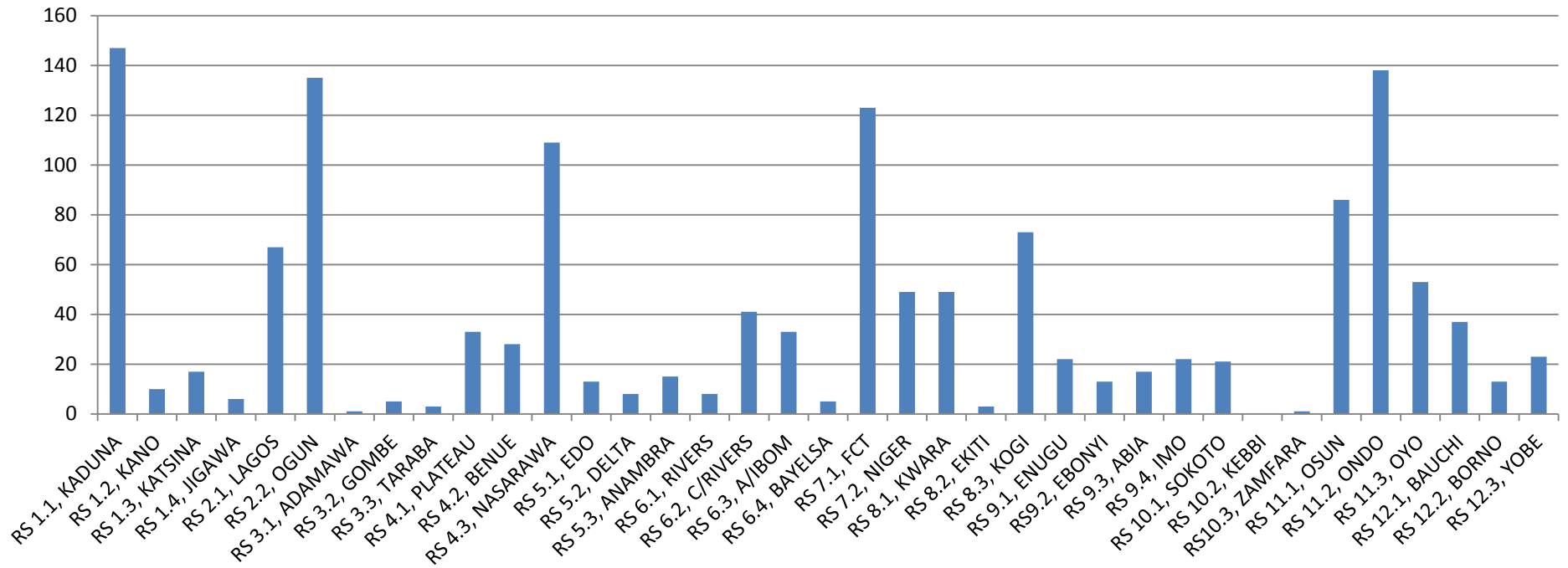
SOURCE: FRSC

FIGURE 5e: TOTAL PERSONS ON STATES BASIS, 2010



SOURCE: FRSC

FIGURE 5f: TOTAL VEHICLES ON STATES BASIS, 2010



SOURCE: FRSC

CRASH RECORDS 2007 - JUNE, 2010.

The crash records between 2007 and June, 2010, revealed that a total of 4017 crashes, with 4076 deaths, 12,994 injured, culminating in 17,070 total casualties . A total of 26,362 Persons and 5,825 Vehicles were also involved.

Comparing the crash records on states basis for the period between 2007 and June, 2010, Ogun State recorded the highest figures with 444 crashes representing (11.05%), followed by Nasarawa State with 268 (6.67%), Kwara, Kaduna, Kogi and Ondo States with 264 (6.56%), 225 (5.60%), 223 (5.55%) and 220 (5.46%) crashes respectively.

Within the same period, Kaduna State had the highest number of deaths with 463 (11.36%), followed by Kogi with 337 (8.27%), Kwara with 328 (8.05%) deaths, Nasarawa, Kogi and Oyo with 317 (7.78%), 282 (6.92%), and 204 (5.01%) deaths respectively. Kaduna State also recorded the highest injuries with 1375 (10.58%), followed by Nasarawa with 1124 (8.65%) and Kwara, Oyo, Ogun and Kogi with 894 (6.88%), 888 (6.83%) 796 (6.13%) and 738 (5.68%) respectively. Casualties records over the same period also showed Kaduna State with highest figure of 1838 (10.77%), followed by Nasarawa state with 1441, (8.44%) then Kwara, Oyo, Kogi and Ogun States with 1222 (7.16%), 1092 (6.40%), 1075 (6.30%), and 985 (5.77%) figures respectively.

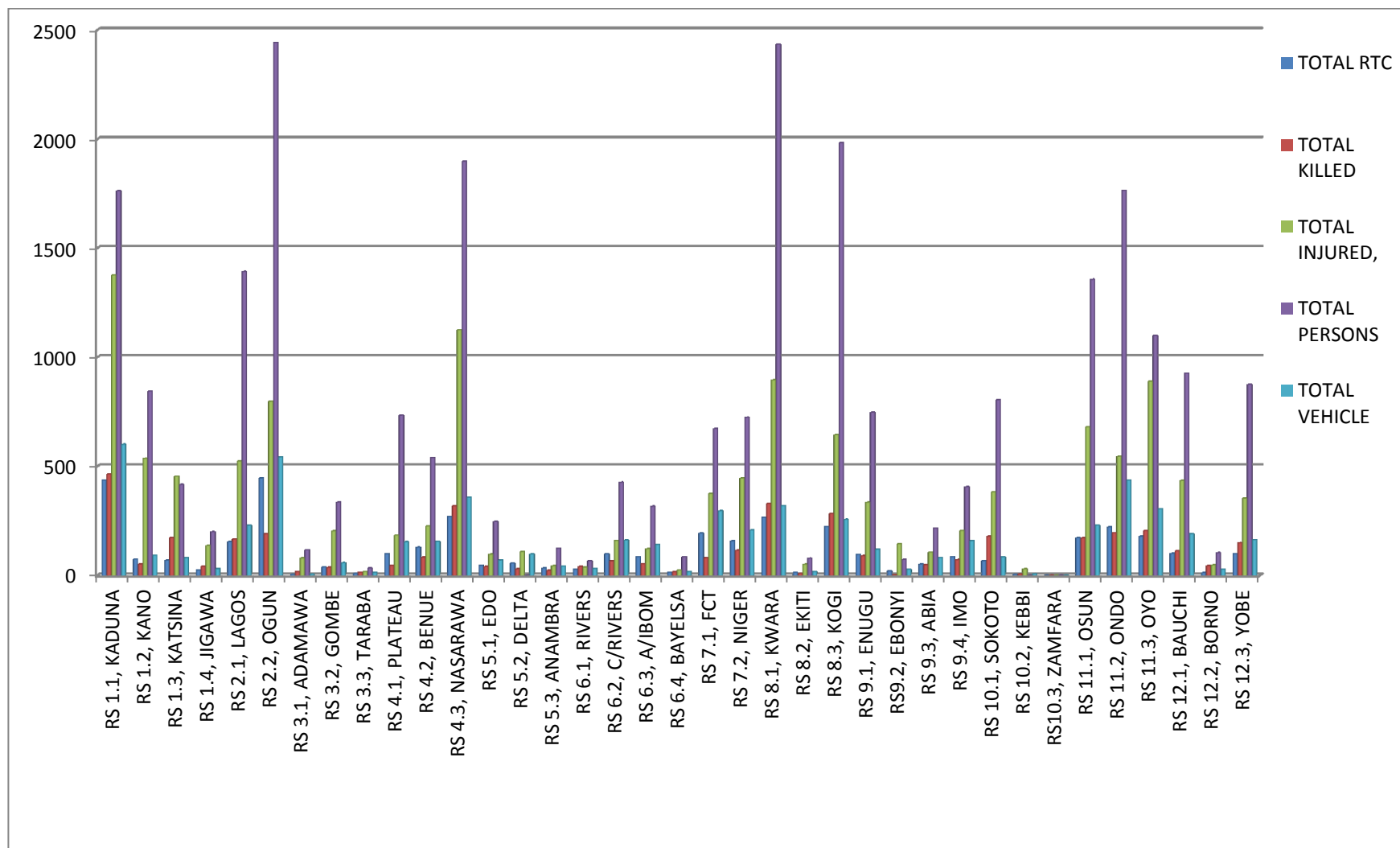
During the same period, Ogun State had the highest number of persons involved in RTC with a total of 2441 representing (9.26%), followed by Kwara state with 2433 (9.23%), Kogi, Nasarawa and Ondo states with 2131 (8.08%), 1896 (7.19%) and 1763 (6.69%) respectively. Furthermore, Kaduna had the highest number of vehicles involved in RTC within the same period with a total of 599 representing 10.28% of the total vehicles involved in RTC, followed by Ogun with 541 (9.29%), and Ondo, Nasarawa, Kwara and Oyo with 435 (7.47%), 356 (6.11%), 318 (5.45%) and 304 (5.22%) respectively. (See Table 6 and figure 6)

From the above, the states that are considered dangerous in terms of tanker and trailer crashes are Ogun, Kaduna, Nasarawa, Kwara, Kogi, Ondo and FCT.

TABLE 6: RTC INVOLVING TANKERS/TRAILERS DATA 2007 TO JUNE 2010.

<i>S/N</i>	<i>SECTOR</i>	<i>TOTAL RTC</i>	<i>TOTAL KILLED</i>	<i>TOTAL INJURED,</i>	<i>TOTAL CASUALTIES</i>	<i>TOTAL PERSONS</i>	<i>TOTAL VEHICLE</i>
1	RS 1.1, KADUNA	225	463	1375	1838	1761	599
2	RS 1.2, KANO	73	57	535	592	843	91
3	RS 1.3, KATSINA	67	171	453	624	415	79
4	RS 1.4, JIGAWA	23	40	135	175	198	29
5	RS 2.1, LAGOS	153	165	522	687	1391	228
6	RS 2.2, OGUN	444	189	796	985	2441	541
7	RS 3.1, ADAMAWA	4	16	88	104	116	5
8	RS 3.2, GOMBE	37	35	202	237	334	56
9	RS 3.3, TARABA	8	13	16	29	32	12
10	RS 4.1, PLATEAU	97	44	183	227	732	152
11	RS 4.2, BENUE	127	81	225	306	538	154
12	RS 4.3, NASARAWA	268	317	1124	1441	1896	356
13	RS 5.1, EDO	44	39	114	153	245	68
14	RS 5.2, DELTA	55	28	107	135	0	96
15	RS 5.3, ANAMBRA	32	21	42	63	123	41
16	RS 6.1, RIVERS	26	69	36	105	65	30
17	RS 6.2, C/RIVERS	97	64	158	222	425	160
18	RS 6.3, A/IBOM	114	52	120	172	315	140
19	RS 6.4, BAYELSA	13	35	123	158	84	16
20	RS 7.1, FCT	192	79	373	452	671	294
21	RS 7.2, NIGER	156	163	444	607	723	206
22	RS 8.1, KWARA	264	328	894	1222	2433	318
23	RS 8.2, EKITI	56	8	49	57	77	64
24	RS 8.3, KOGI	223	337	738	1075	2131	272
25	RS 9.1, ENUGU	94	88	333	421	746	118
26	RS 9.2, EBONYI	78	2	143	145	80	27
27	RS 9.3, ABIA	50	47	105	152	215	80
28	RS 9.4, IMO	84	70	204	274	404	157
29	RS 10.1, SOKOTO	105	177	381	558	803	83
30	RS 10.2, KEBBI	4	6	28	34	0	6
31	RS 10.3, ZAMFARA	1	2	6	8	8	1
32	RS 11.1, OSUN	171	170	679	849	1355	229
33	RS 11.2, ONDO	220	194	544	738	1763	435
34	RS 11.3, OYO	177	204	888	1092	1098	304
35	RS 12.1, BAUCHI	126	111	433	544	925	189
36	RS 12.2, BORNO	11	43	46	89	102	27
37	RS 12.3, YOBE	98	148	352	500	874	162
TOTAL		4017	4076	12994	17070	26362	5825

FIGURE 6: GRAPHICAL REPRESENTATION OF RTC INVOLVING TANKERS/TRAILERS 2007 TO JUNE 2010.



Source : FRSC

h. **ROUTE ANALYSIS**

The most prone route to tankers/trailers crashes in Nigeria is Lagos -Ibadan expressway which recorded a total of 296 crashes, that is is 7.37% of the crashes between 2007 and June, 2010. Other routes with high crash records are, Kaduna - Zaria with 115 crashes (2.86%), Ogbomoso - Ilorin with 113 crashes (2.81%), Lokoja-Abuja with 99 crashes (2.46%) and Enugu -Otukpo with 90 crashes (2.24%).

Uyo - Umuahia, Benin - Ekpoma and Port-Harcourt - Aba recorded 12 cases (0.30%) each, - the least Tanker/Trailer RTC within the period. (See Table 7 & Figure 7)

TABLE 7: ROUTE ANALYSIS ON RTC INVOLVING TANKERS/TRAILERS.

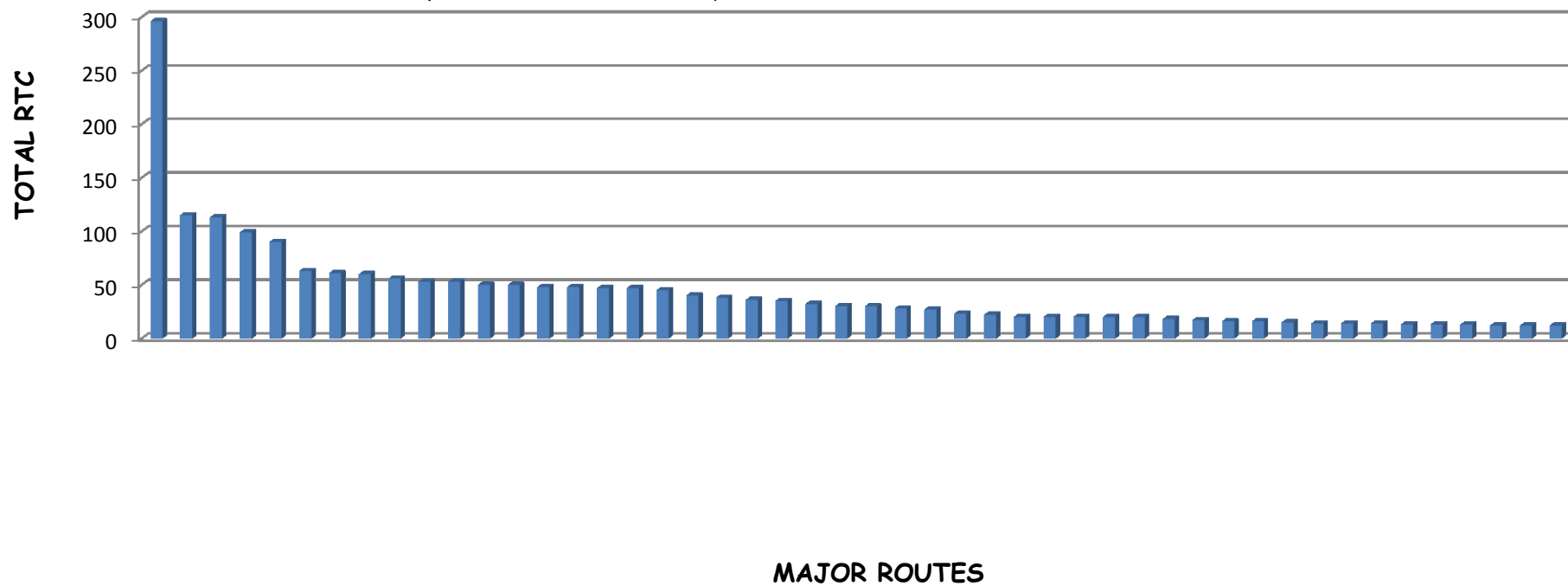
S/NO	ROUTE	NO OF CASES				TOTAL	% OF RTC
		2007	2008	2009	2010 (JUNE)		
1	LAGOS - IBADAN	39	68	111	78	296	7.37
2	KADUNA - ZARIA	14	34	39	28	115	2.86
3	OGBOMOSHO - ILORIN	30	39	20	27	113	2.81
4	LOKOJA - ABUJA	18	19	12	50	99	2.46
5	ENUGU - OTUKPO	24	18	22	26	90	2.24
6	JOS - MAIDUGURI	26	21	19	14	80	1.99
7	AKURE - OWO	16	18	15	14	63	1.57
8	ZUBA - KADUNA	3	11	10	37	61	1.52
9	LAFIA - MAKURDI	9	18	26	7	60	1.49
10	LOKOJA - OKENE	13	21	12	10	56	1.39
11	SOKOTO - GUSAU	15	15	11	12	53	1.32
12	LAFIA - AKWANGA	8	18	18	6	50	1.24
13	MOKWA - JEBBA	22	17	3	8	50	1.24
14	OLORU - JEBBA	19	18	0	11	48	1.19
15	KANO - MAIDUGURI	15	13	9	11	48	1.19
16	KANO - ZARIA	13	5	15	14	47	1.17
17	AKWANGA - KEFFI	9	22	3	13	47	1.17
18	CALABAR - AKAMKPA	9	14	11	11	45	1.12

19	JOS, - HAWAKIBO	9	6	22	3	40	0.99
20	KUBWA - ABUJA	14	9	8	7	38	0.95
21	IBADAN - OYO	4	14	9	9	36	0.90
22	MOKWA - KADUNA	14	8	4	9	35	0.87
23	LAGOS - ABEOKUTA	9	15	0	8	32	0.80
24	UYO - ABA	4	11	9	6	30	0.75
25	ORE - IJEBU/ODE	9	11	0	10	30	0.75
26	AKWANGA - JOS,	5	8	5	10	28	0.70
27	BAUCHI - JOS	8	6	10	3	27	0.67
28	JOS - KADUNA	3	6	10	4	23	0.57
29	DUTSE - KANO	4	7	5	6	22	0.55
30	LOKOJA - AJAOKUTA-ANKPA	5	4	6	6	21	0.52
31	GOMBE - BAUCHI	4	5	5	6	20	0.50
32	BENIN - AGBOR	6	7	4	3	20	0.50
33	NJIABA - MGBIDI	6	6	3	5	20	0.50
34	NGOR - OKPALA - OWERRI	8	5	3	4	20	0.50
35	AKWAIBOM - UYO	4	7	3	6	20	0.50
36	UMUAHIA - ENUGU	5	5	4	4	18	0.45
37	KANO - KATSINA	4	4	5	4	17	0.42
38	GOMBE - YOLA	5	4	0	7	16	0.40
39	ENUGU - ONITSHA	2	4	6	4	16	0.40
40	OMI/ASORO - ABEOKUTA	4	6	2	2	14	0.35
41	KANO - GWARZO	4	5	2	3	14	0.35

42	BODESA'DU - JEBBA	9	3	0	2	14	0.35
43	OTUKPO - MAKURDI	3	6	1	3	13	0.32
44	ABAKALIKI - ENUGU	3	2	2	6	13	0.32
45	OGBOMOSHO - OSOGBO	3	3	3	4	13	0.32
46	PORTHARCOURT - ABA	2	3	4	3	12	0.30
47	BENIN - EKPOMA	6	4	0	2	12	0.30
48	UYO - UMUAHIA	2	7	0	3	12	0.30
49	OTHER ROUTES	297	324	203	312	1950	48.54
	TOTAL					4017	99.91

SOURCE: FRSC.

FIGURE 7: RTC INVOLVING TANKERS/TRAILERS ON ROUTE BASIS, 2007 - JUNE 2010.



SOURCE: FRSC

i. **SOME PROMINENT BLACK SPOTS (SPOT ANALYSIS) OF
ARTICULATED VEHICLE CRASHES**

Some black spots where these tanker/trailer crashes occurred were also identified. (See Table 4 and Figure 4 below)

These include 40 RTC at Deeper Life Camp area, along Lagos-Ibadan route. This was closely followed by Tunga-ruwa Sheji village on Mokwa - Jebba road with 36. Next is Ogere with 31, Kofar Dawaki along Kaduna - Zaria road with 23 cases, 9th Mile along Otukpo-Enugu road with 22 , RCCG along Lagos-Ibadan and Mariri along Kaduna - Zaria road with 21 cases respectively. (See Table 8 and Figure 8 below).

TABLE 8. SPOT ANALYSIS OF TANKER/TRAILER CRASHES IN NIGERIA

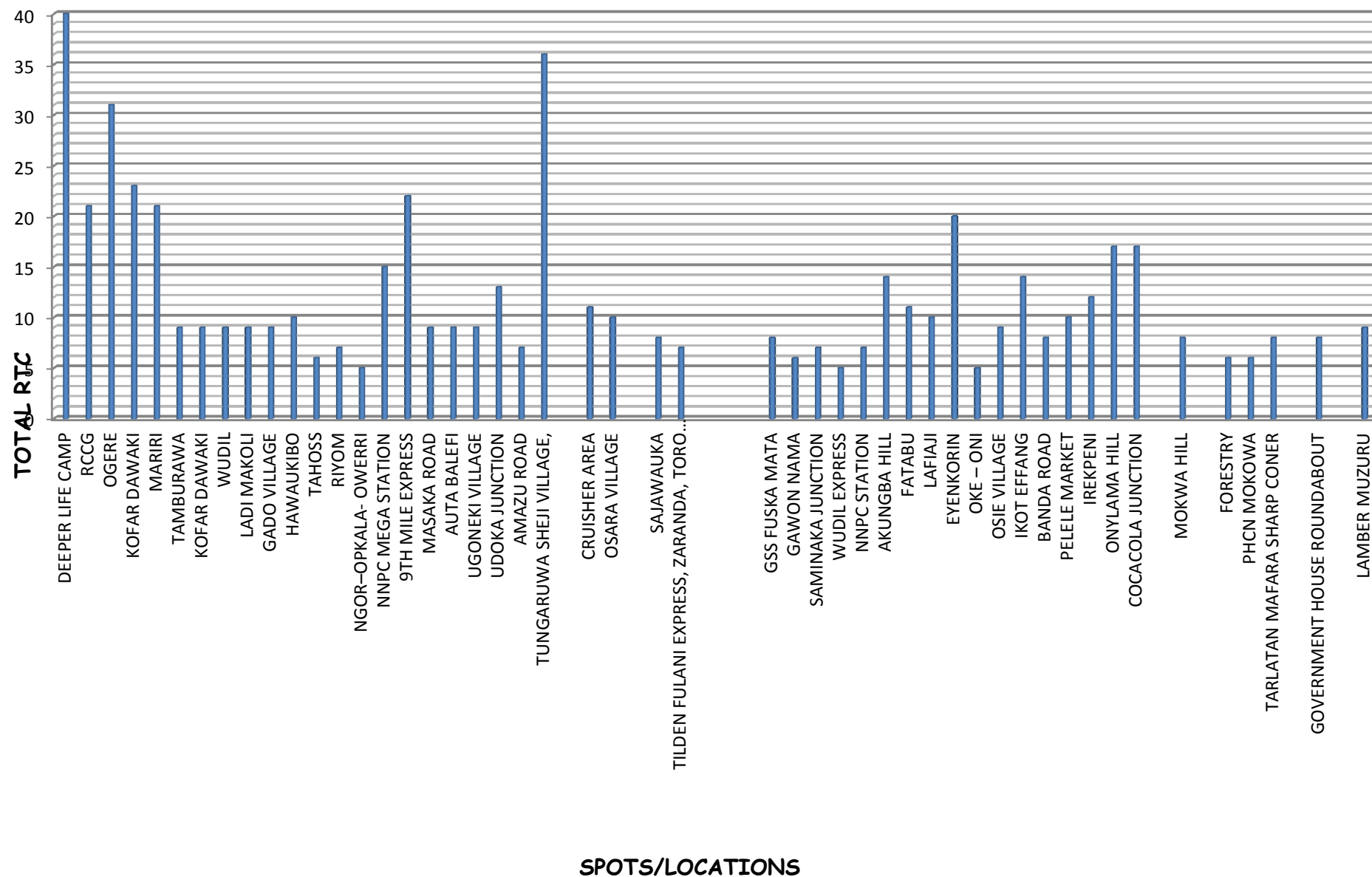
S/NO	ROUTE	SPOT/LOCATION	NO OF CASES				TOTAL	TOT. CRASHES ON THE ROUTE	% OF TOTAL CRASHES ON THE ROUTE
			2007	2008	2009	2010 (JUNE)			
1.	LAGOS - IBADAN	DEEPER LIFE CAMP	12	2	7	19	40	296	13.51
		RCCG	3	4	5	9	21	296	7.09
		OGERE	7	3	12	9	31	296	10.47
2.	KADUNA - ZARIA	KOFAR DAWAKI	3	2	8	10	23	115	20.0
		MARIRI	3	6	4	8	21	115	18.26
		TAMBURAWA	2	2	3	2	9	115	7.83
3.	KANO - ZARIA	KOFAR DAWAKI	3	3	2	1	9	47	19.15
		WUDIL	2	2	4	1	9	47	19.15
4.	KANO - MAIDUGARI	LADI MAKOLI	2	2	2	3	9	48	18.75
		GADO VILLAGE	2	0	4	3	9	48	18.75
5.	HAWANKIBO - JOS,	HAWAUKIBO	3	3	2	2	10	40	25.00
		TAHOSS	2	0	2	2	6	40	15.00
		RIYOM	2	0	2	3	7	40	17.5
6.	OTUKPO - ENUGU	NGOR-OPKALA-OWERRI	2	0	1	2	5	79	6.33
		NNPC MEGA STATION	6	2	1	6	15	79	18.99
		9 TH MILE EXPRESS	12	3	5	2	22	79	27.85
7.	AKWANGA - KEFFI	MASAKA ROAD	2	3	2	2	9	47	19.15

		AUTA BALEFI	2	2	3	2	9	47	19.15
8.	BENIN - AGBOR								
		UGONEKI VILLAGE	2	3	2	2	9	20	45.00
9.	ONITSHA - ENUGU	UDOKA JUNCTION	1	5	5	2	13	16	81.25
		AMAZU ROAD	1	2	1	3	7	16	434.75
10.	MOKWA - JEBBA	TUNGARUWA SHEJI VILLAGE, NEAR OKOKO VILLAGE	10	9	7	10	36	50	72.00
11.	LOKOJA - OKENE	CRUISHER AREA	2	2	2	5	11	71	15.49
		OSARA VILLAGE	1	1	3	0	5	71	7.04
12.	BAUCHI - GOMBE	SAJAWAUKA	1	2	1	4	8	20	40.00
13.	JOS - BAUCHI	TILDEN FULANI EXPRESS, ZARANDA, TORO SATURDAY MARKET	3	1	2	1	7	27	25.93
14.	JOS - KADUNA	GSS FUSKA MATA	2	1	3	2	8	23	34.78
		GAWON NAMA	1	3	2	1	6	23	26.09
		SAMINAKA JUNCTION	2	1	2	1	7	23	30.43
15.	DUTSE - KANO	WUDIL EXPRESS	1	2	1	1	5	22	22.73
		NNPC STATION	1	2	1	1	7	22	31.82
16.	AKUNGBA-KABBA JUNCTION	AKUNGBA HILL	5	3	4	2	14	63	22.22

17.	MOKWA - JEBBA	FATABU	4	3	3	1	11	50	22.00
		LAFIAJI	4	2	3	1	10	50	20.00
18.	ILORIN - OGBOMOSHO	EYENKORIN	8	4	4	4	20	113	17.70
		OKE - ONI	2	1	1	1	5	113	4.42
19.	JEBBA - SAADU	OSIE VILLAGE	5	1	2	1	9	113	7.96
20.	CALABAR - IKANG	IKOT EFFANG	5	3	4	2	14		
21.	LOKOJA - ABUJA	BANDA ROAD	2	1	3	2	8	42	19.05
		FELELE MARKET	4	2	2	2	10	42	23.81
		IREKPENI	5	3	2	2	12	42	28.57
22.	ENUGU - 9 TH MILE	ONYLAMA HILL	9	4	1	3	17	79	21.52
		COCACOLA JUNCTION	9	4	1	3	17	79	21.52
23.	MOKWA - KADUNA	MOKWA HILL	2	1	3	2	8	35	22.86
		FORESTRY	2	1	2	1	6	35	17.14
		PHCN MOKOWA	2	1	1	2	6	35	17.14
24.	SOKOTO - GUSAU	TARLATAN MAFARA SHARP CONER	2	2	2	2	8	53	15.09
		GOVERNMENT HOUSE ROUNDAOUT	2	2	2	2	8	53	15.09
		LAMBER MUZURU	1	3	3	2	9	53	16.98

SOURCE: FRSC.

FIGURE 8: RTC INVOLVING TANKERS/TRAILERS ON MAJOR BLACK SPOTS, 2007 - JUNE, 2010



SOURCE: FRSC

j. MONTHLY ANALYSIS.

A careful analysis of Road Traffic Crashes involving Tankers and Trailers between 2007 and June, 2010 also revealed that the highest crashes occurred in the month of March with 358 crashes representing 8.91% of the total crashes within the period. It was closely followed by the months of June with 346 cases (8.61%), April, 341 (8.49%) and May 325 (8.09%).

It is pertinent to note that all these months with high crashes fall within the rainy season. It is evident therefore that the highest crashes among Tankers/Trailers occurred during the rainy season.

The months of November and October recorded the least crashes with a total of 211 (6.26%) and 233 (6.92%) respectively. These months also recorded low or no rains. The slippery surface of the road, deteriorating condition of the road during the rainy season and poor braking system may have accounted for the high incidence of tankers and trailers crashes during the rainy season. (See Table 9 and Figure 9 below).

Also, as earlier revealed, a monthly average of 95.86 crashes involving Tankers and Trailers were recorded between 2007 and June 2010. The breakdown showed 50.58 in 2007, 102.42 in 2008, 101.08 in 2009 and 161.33 in 2010. On fatalities, an average monthly 97.05 deaths were recorded with 67.08 in 2007, 101.75 in 2008, 90.42 in 2009 and 160.83 in 2010. As per the injuries an average of 309.38 persons got injured monthly. The figure rose from 180.75 in 2007, to 315.92 in 2008, 309.5 in 2009 and 536.67 in 2010.

At least an average of 404.05 persons were either injured or killed monthly as a result of Road Traffic Crash (RTC) involving Tankers and Trailers between 2007 and June 2010. On more specific yearly terms, an average of 247.83 persons were injured or killed in 2007, 417.67 persons in 2008. 2009 and 2010 had 399.92 and 697.5 persons respectively. For the number of persons involved, on the monthly average, 627.67 persons were involved, with 369.12 in 2007, 583.25 in 2008, 668.67 in 2009 and as high as 1,151.5 persons in 2010.

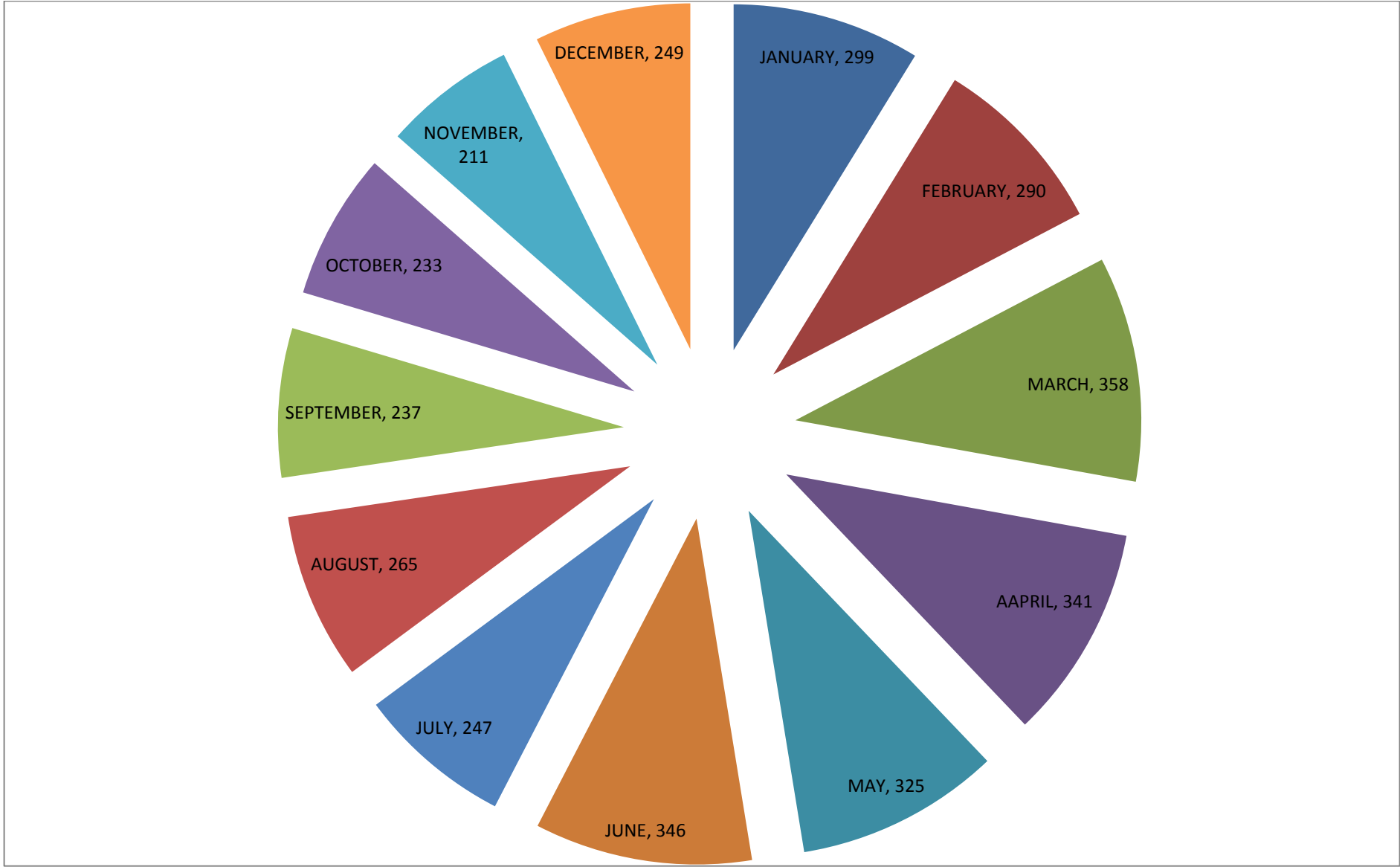
Many vehicles including non articulated lorries were involved in the crashes. On the average, 138.69 vehicles were crashed monthly with the highest figures of 237.83 recorded in 2010, then 147.25 in 2009, and 137.92 in 2008. The least figure of 81.33 was recorded as the monthly average crashed vehicles in 2007. (See Tables 1b and 1c and Figures 1b and 1c).

TABLE 9: MONTHLY ANALYSIS OF TANKERS/TRAILERS RTC BETWEEN 2007 AND JUNE, 2010.

S/N	SECTOR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1	RS 1.1, KADUNA	24	15	15	24	25	17	28	16	22	11	14	23	234
2	RS 1.2, KANO	9	7	9	6	5	11	4	6	7	12	4	5	85
3	RS 1.3, KATSINA	16	8	9	4	2	1	3	8	3	0	0	0	54
4	RS 1.4, JIGAWA	1	1	4	6	4	1	2	1	1	0	5	1	27
5	RS 2.1, LAGOS	10	6	17	13	20	11	11	15	6	12	2	1	124
6	RS 2.2, OGUN	26	33	49	30	42	31	34	28	34	44	30	32	413
7	RS 3.1, ADAMAWA	0	0	0	0	0	1	0	0	0	0	0	0	1
8	RS 3.2, GOMBE	3	5	2	3	1	3	3	3	3	3	3	2	34
9	RS 3.3, TARABA	0	0	0	0	0	0	0	0	0	0	0	0	0
10	RS 4.1, PLATEAU	6	6	3	0	4	6	8	13	8	8	0	10	72
11	RS 4.2, BENUE	8	8	12	11	9	9	12	8	7	8	4	15	111
12	RS 4.3, NASARAWA	14	12	10	16	11	10	12	12	10	9	7	11	134
13	RS 5.1, EDO	4	4	7	2	6	2	3	5	1	2	5	3	44
14	RS 5.2, DELTA	1	3	6	19	9	4	6	6	3	5	3	4	59
15	RS 5.3, ANAMBRA	1	2	5	1	4	6	3	3	0	0	2	4	31
16	RS 6.1, RIVERS	3	2	6	7	3	8	6	2	3	1	0	3	44
17	RS 6.2, C/RIVERS	8	7	8	11	15	7	2	4	3	3	7	11	80
18	RS 6.3, A/IBOM	6	4	7	13	6	9	6	5	6	3	5	8	78
19	RS 6.4, BAYELSA	0	2	1	1	0	2	0	0	0	0	2	0	8
20	RS 7.1, FCT	10	12	10	15	8	15	5	14	7	6	9	9	120
21	RS 7.2, NIGER	11	14	21	15	16	11	8	13	14	8	13	10	154
22	RS 8.1, KWARA	13	16	30	24	25	19	16	11	13	18	7	14	206
23	RS 8.2, EKITI	7	3	0	3	2	3	2	9	3	2	2	6	42
24	RS 8.3, KOGI	16	25	28	16	18	32	6	19	14	20	16	10	220
25	RS 9.1, ENUGU	6	5	9	6	1	4	2	1	4	3	4	4	49
26	RS 9.2, EBONYI	2	3	7	8	4	2	2	3	4	4	4	4	47
27	RS 9.3, ABIA	2	8	7	5	10	3	2	1	5	2	4	3	52
28	RS 9.4, IMO	5	11	9	9	11	7	5	12	5	14	3	5	91
29	RS 10.1, SOKOTO	9	3	4	9	2	9	2	0	2	2	3	3	48
30	RS 10.2, KEBBI	0	0	0	0	0	6	0	0	0	0	0	0	6
31	RS 10.3, ZAMFARA	0	0	0	0	0	0	0	0	0	0	0	0	0
32	RS 11.1, OSUN	20	18	8	15	18	18	10	7	9	2	7	4	136
33	RS 11.2, ONDO	19	18	10	17	23	32	11	6	7	5	12	15	175
34	RS 11.3, OYO	24	11	25	11	13	26	10	11	14	7	14	5	161
35	RS 12.1, BAUCHI	9	14	7	5	4	5	12	11	8	4	3	12	94
36	RS 12.2, BORNO	0	0	6	2	0	3	2	0	0	2	0	2	10
37	RS 12.3, YOBE	6	4	7	14	4	12	9	12	11	13	17	10	119
	TOTAL	299	290	358	341	325	346	247	265	237	233	211	249	3401

SOURCE: FRSC

FIGURE 9: GRAPHICAL PRESENTATION OF RTC INVOLVING TANKERS/TRAILERS ON MONTHLY BASIS, 2007-JUNE, 2010.



SOURCE : FRSC.

k. DAY OF THE WEEK/DAILY ANALYSES.

During the period under review, (2007 - June, 2010), the highest accident was recorded on Saturday with a total of 537 cases representing 13.69%, It was closely followed by Thursday - 514 (12.80%), Friday - 493 (12.27%), and Tuesday - 476 (11.85%). About 2009 crashes occurred between Wednesdays and Saturdays representing 50.01%.

Sundays with 414 cases (10.31%) and Mondays with 371 cases (9.24%) recorded the lowest crashes and are therefore relatively safer on the road while considering Tankers and Trailers crashes. (See Table 10 and Figure 10 below)

The Road Traffic Crash records of Tankers and Trailers between 2007 and June, 2010 also revealed as earlier indicated in the Tables 1b and 1c that an average of 3.15 crashes occurred per day. In 2007, an average of 1.66 tanker/trailer crashes were recorded daily, this rose to 3.37 in 2008, 3.32 in 2009 and 5.31 in 2010. On the average, 3.19 persons were killed daily with average daily deaths in 2007 recorded as 2.21, then 3.35 for 2008, 2.97 for 2009 and 5.30 for 2010.

On the number of persons injured, 10.16 persons on the average were injured daily between 2007 and June, 2010. On yearly consideration, an average of 5.94 persons were injured daily in 2007, 10.39 persons in 2008, 10.18 persons in 2009 and 17.69 injuries per day average in 2010. The records also revealed that an average of 13.29 persons were the daily casualties with 8.15 for 2007, 13.73 in 2008, 13.15 in 2009 and 22.99 in 2010.

An analysis of number of persons involved on daily basis revealed that apart from the 13.29 persons either injured or killed (total casualties) in Tanker/Trailer crashes, additional 7.27 persons on the average on daily basis escaped death/injury as 20.64 persons on the average were involved daily in RTC involving Tankers and Trailers on Nigerian roads. 12.14 persons were involved on daily average in 2007, 19.18 persons in 2008, 21.98 persons in 2009 and 37.96 persons in 2010.

Further analysis revealed that on the average, on daily basis, 4.6 vehicles crashed in RTC involving Tankers and Trailers on Nigerian roads. 2.67 vehicles on the average crashed daily in

2007, 4.53 in 2008, 4.84 in 2009 and a very high figure of 7.84 vehicles per day in 2010. (See Tables 1b and 1c and Figures 1b and 1c)

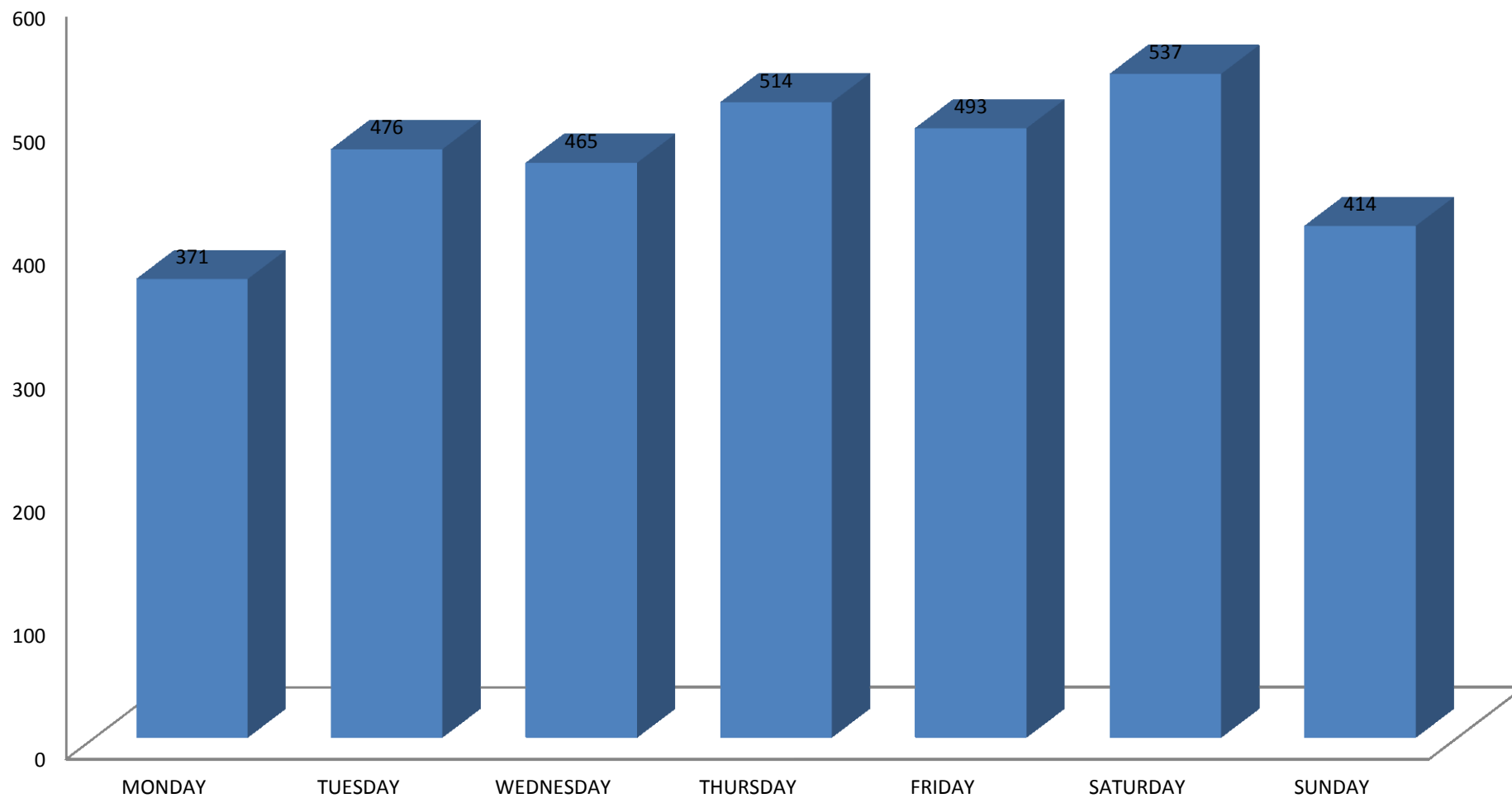
The analysis revealed a steady increase in crashes and the attendant loss of lives and properties as a result of Road Traffic Crashes involving Tankers and Trailers on Nigerian roads.

TABLE 10: DAY OF THE WEEK ANALYSIS, 2007- JUNE 2010.

SECTOR	MON	TUE	WED	THU	FRI	SAT	SUN	N/A	TOTAL
RS 1.1, KADUNA	29	28	42	39	33	35	28	0	234
RS 1.2, KANO	8	7	11	17	7	14	5	4	73
RS 1.3, KATSINA	7	7	15	7	8	8	9	3	64
RS 1.4, JIGAWA	0	0	1	1	2	0	0	2	6
RS 2.1, LAGOS	16	20	19	29	11	14	17	0	126
RS 2.2, OGUN	45	51	61	51	61	67	41	0	367
RS 3.1, ADAMAWA	0	0	0	0	0	0	0	1	1
RS 3.2, GOMBE	2	9	9	6	4	2	7	5	44
RS 3.3, TARABA	0	1	1	2	2	0	0	2	8
RS 4.1, PLATEAU	5	8	9	14	11	15	14	3	76
RS 4.2, BENUE	9	14	16	18	12	19	16	2	106
RS 4.3, NASARAWA	13	12	23	18	19	26	23	3	137
RS 5.1, EDO	5	3	3	9	8	8	7	2	45
RS 5.2, DELTA	7	13	6	16	6	6	5	3	52
RS 5.3, ANAMBRA	4	5	2	6	6	15	2	0	30
RS 6.1, RIVERS	3	1	4	13	3	6	2	2	22
RS 6.2, C/RIVERS	8	22	6	11	13	18	15	3	96
RS 6.3, A/IBOM	8	8	17	10	15	10	7	7	82
RS 6.4, BAYELSA	0	0	1	0	5	3	1	2	12
RS 7.1, FCT	16	12	13	19	16	14	19	3	112
RS 7.2, NIGER	15	22	15	28	22	28	22	3	155
RS 8.1, KWARA	33	38	23	27	41	42	33	4	241
RS 8.2, EKITI	0	1	5	3	1	3	0	1	14
RS 8.3, KOGI	24	29	40	29	34	37	31	2	226
RS 9.1, ENUGU	6	8	8	9	9	6	4	3	53
RS9.2, EBONYI	3	13	0	0	11	6	2	0	15
RS 9.3, ABIA	6	6	4	7	8	13	5	5	54
RS 9.4, IMO	9	12	6	13	14	17	10	2	83
RS 10.1, SOKOTO	7	10	8	8	6	3	7	1	50
RS 10.2, KEBBI	0	0	0	0	1	0	0	4	5
RS10.3, ZAMFARA	0	0	0	0	0	0	0	0	0
RS 11.1, OSUN	20	34	18	24	24	27	15	3	165
RS 11.2, ONDO	20	24	27	22	26	26	23	4	172
RS 11.3, OYO	22	23	22	20	33	20	23	2	165
RS 12.1, BAUCHI	9	17	15	19	12	17	9	2	100
RS 12.2, BORNO	1	1	1	2	1	1	2	4	13
RS 12.3, YOBE	11	17	14	17	8	11	10	1	89
TOTAL	371	476	465	514	493	537	414	88	3293
PERCENTAGE	7th 11.3	4th 14.2	5th 14.1	2nd 14.9	3rd 14.7	1st 15.64	6th 12.6	8th 2.672	

SOURCE : FRSC.

FIGURE 10: DAYS OF THE WEEK ANALYSIS ON RTC INVOLVING TANKERS/TRAILERS 2007 - JUNE, 2010



SOURCE: FRSC

I. TIME OF THE DAY CRASH ANALYSES

In 2007, the highest number of crashes involving "tankers and trailers" occurred between 1600 and 1800hrs with 62 crashes (14.35%), followed by 1400 to 1600 hrs with 53 cases (12.27%) and 12:00 hrs to 14 hours, with 52 cases (12.04%). So in actual fact, 38.66% of the crashes occurred between 1200 hrs and 1800 hrs.

In 2008, the highest number of "tankers/trailers" crashes happened between 1000 and 1200 hrs with 87 cases (13.22%), then followed by 0800 to 1000 hrs with 84 cases, (12.77%) and followed by 1200 - 1400 hrs with 83 cases (12.61%). So, a great percentage of the crashes occurred 38.60%, between 0800 hrs and 1400 hrs of the day.

In 2009, most tankers/trailers crashes occurred between 1400 and 1600 hrs with 112 cases (15.16%), followed by 1600 - 1800 hrs with 98 cases (13.24%) and between 0800 and 1000 hrs with 93 cases (12.57%).

In 2010, 100 cases of tanker/trailer crashes, which is 13.33% occurred between 1000 - 1200 hrs, followed by 1200 hrs - 1400 hrs with 82 cases (10.93%) and between 1400 hrs and 1600 hrs and 1600 - 1800 hrs with 80 cases (10.67%) each. From the above, it is evident that more of the tankers/trailers Crashes occurred during the day between 0600 and 1800 hrs with (63.6%) of the total crashes during the period 2007 - June, 2010.

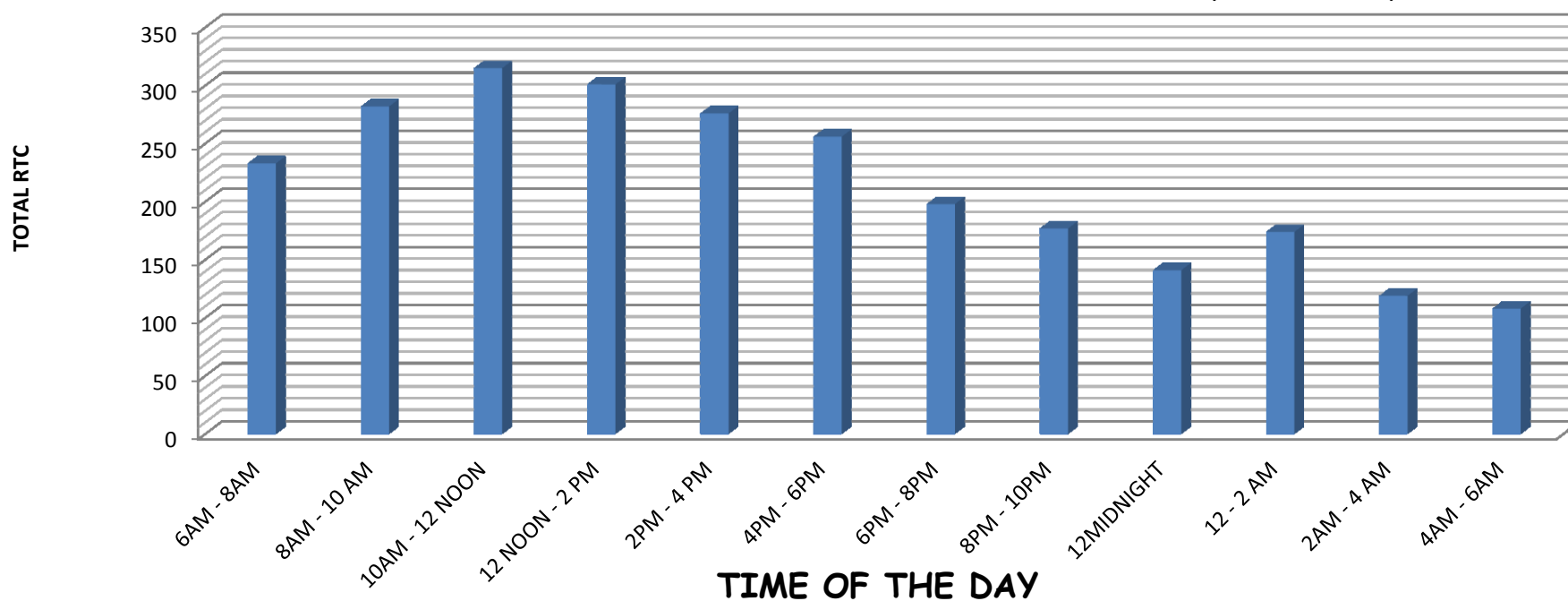
Cumulative records of crashes between 2007 and June, 2010, indicated that the period between 1000 and 1200 hours, had the highest crashes with 315 which is 12.21% of the total crashes. Other periods with high incidences are 1200 and 1400 hrs with 301 cases (11.67%), followed by 0800 and 1000 hrs with 282 cases (10.93 %), also 1400 and 1600 hrs with 276 (10.70%) and 1600 and 1800 hrs with 256 cases (9.92%) (See Table 11 and Fig 11 below). From the analysis, fatigue and lack of sleep could have been the major cause of the crashes, as having the highest crashes between 0800 and 1600 hours, revealed that many of the crashes occurred about six to seven hours of continuous driving after take-off, since the operators in most cases set out as early as 0500hrs in the morning.

TABLE 11. TIME OF THE DAY CRASH ANALYSIS 2007 - 2010.

TIME	6AM - 8AM	8AM - 10 AM	10AM - 12 NOON	12 NOON - 2 PM	2PM - 4 PM	4PM - 6PM	6PM - 8PM	8PM - 10PM	12MIDNIGHT	12 - 2 AM	2AM - 4 AM	4AM - 6AM	TOTAL
2007	31	37	39	52	53	62	39	27	26	36	18	12	432
2008	58	84	87	83	31	16	34	70	68	80	30	17	658
2009	77	93	89	84	112	98	56	36	7	28	28	32	740
2010	67	68	100	82	80	80	69	44	40	30	43	47	750
TOTAL	233	282	315	301	276	256	198	177	143	174	119	108	2582

SOURCE: FRSC

FIGURE 11: TIME OF THE DAY CRASH ANALYSIS INVOLVING TANKERS/TRAILERS, 2007-JUNE, 2010



SOURCE: FRSC

m. **CAUSES OF CRASHES ANALYSIS.**

Analysis of 2007 records revealed that Dangerous Driving with 182 cases (28.30%), followed by Speed Violation with 164 cases (25.51%), Tyre burst/violation 71 cases (11.04%) Obstruction 38 cases and were the major causes of the crashes.

In 2008, Dangerous Driving with 292 cases (26.89%), Speed Violation with 225 cases (20.72%) Brake Failure with 117 cases (10.77%), Tyre Burst/Violation 108 cases (9.94%), Obstruction with 84 cases (7.73%) and Dangerous Overtaking 40 cases (3.68%) were the prominent causes of the tankers/trailers accidents. .

In 2009, Dangerous Driving 352 (26.15%), Speed Violation 253 (18.80%), Brake Failure 132 (9.8%), Obstruction 106 (7.88%), Tyre Burst/Violation 64 (4.75%) and Loss of Control 58 (4.31%) were the most prominent causes of articulated lorry crashes.

In 2010 (Jan - June), Speed Violation 265 cases (27.21%), Dangerous Driving 212 (21.77%), Tyre Burst/Violation 94 (9.65%), Obstructions 78 cases (8.01%), Brake Failure 58 (5.95%) and Overloading Violations 55 (5.65%) were the major causes of tanker/trailer crashes on Nigerian roads.

Between 2007 and June 2010, Cumulatively, Dangerous Driving (DGD) accounted for the highest cause of crashes involving tankers and trailers with 1,038 representing 26.41%. Other major causes include Speed Violation (SPV) with 907 cases (23.08 %), Brake Failure (BFL) 359 (9.13%), Tyre Violation

(TYV) with 337 (8.58%), Obstructions (OBS) with 306 (7.79 %) , and Dangerous Overtaking (DOV) 116 (2.95%). (See Table 12 and Figure 12).

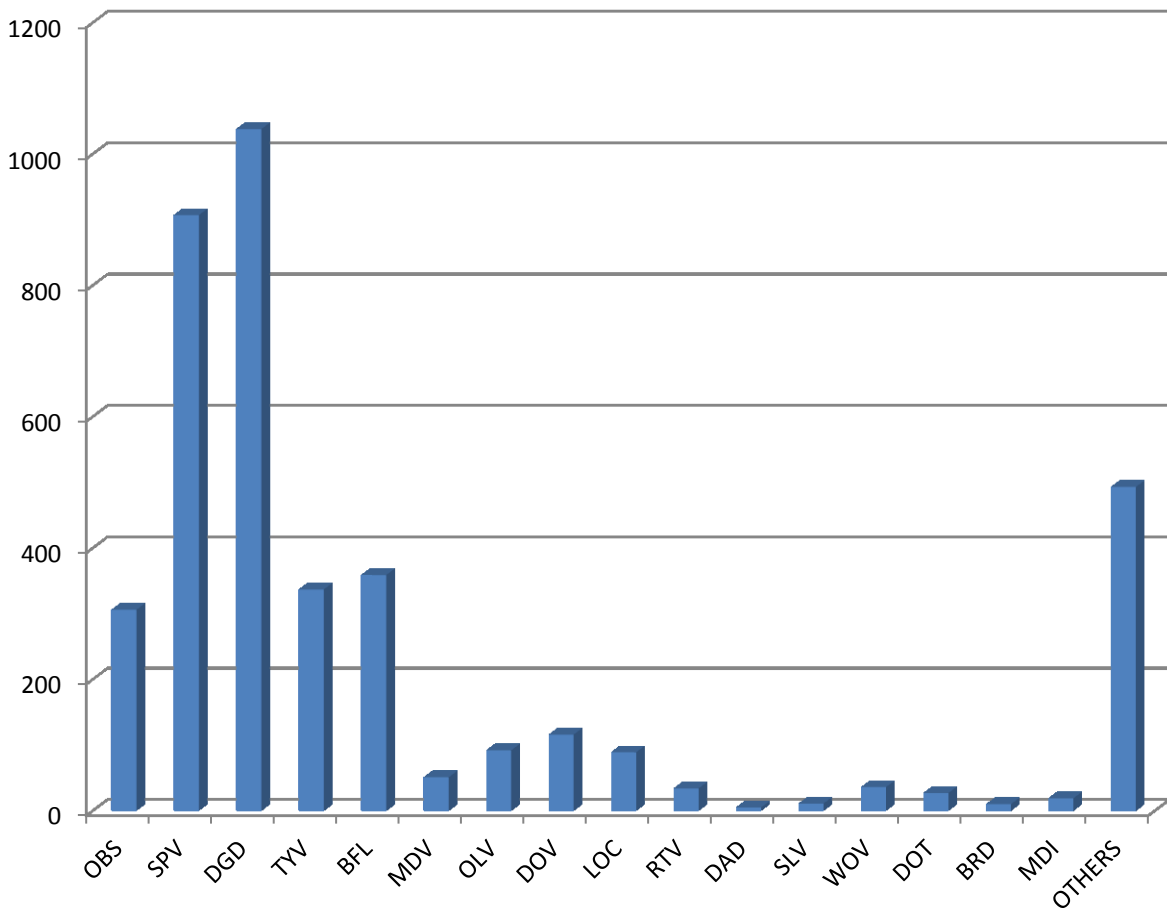
TABLE 12: SUMMARY OF CAUSES OF TANKERS/TRAILERS RTC, 2007-2010.

CAUSES	TOTAL	%
OBS	313	7.79
SPV	927	23.08
DGD	1098	26.41
TYV	337	8.58
BFL	359	9.14
MDV	51	1.3
OLV	92	2.34
DOV	116	2.95
LOC	89	2.26
RTV	34	0.87
DAD	5	0.13
SLV	11	0.28
WOV	36	0.92
DOT	27	0.69
BRD	10	0.25
MDI	19	0.48
OTHERS	493	12.54
TOTAL	4017	100

LEGEND:

OBS- OBSTRUCTION; **SPV-** SPEED VIOLATION; **DGD-** DANGEROUS DRIVING; **TYV-** TYRE VIOLATION; **BFL-** BRAKE FAILURE; **MDV-** MECHANICALLY DEFICIENT VEHICLE; **OLV-** OVERLOADING VIOLATION; **DOV-** DANGEROUS OVERTAKING; **LOC-** LOSS OF CONTROL; **RTV-** ROUTE VIOLATION; **DAD-** DRIVING UNDER THE INFLUENCE OF ALCOHOL AND DRUG; **SLV-** SPEED LIMIT VIOLATION; **WOV-** WRONG OVERTAKING;

FIGURE 12: GRAPHICAL PRESENTATION OF CAUSES OF TANKERS/TRAILERS RTCs, 2007 - JUNE, 2010



SOURCE: FRSC

n. **SEVERITY/FATALITY INDEXES**

In 2007, 1.3 persons got killed in every tanker/trailer crash, while in 2008, 1 person got killed in every accident. In 2009, 1 person died per crash and 2010, 1 person died per crash. This means virtually every tanker/trailer accident is fatal.

As per casualty per RTC involving tanker and trailer crashes, 5 persons were either killed or injured in 2007. In 2008, 5 casualties per crash were also recorded, while in 2009, 4 casualties were recorded per crash. As at June 2010, 4 casualties per tanker/trailer crash were recorded.

The severity index, which is a ratio of number killed per RTC and casualty per RTC revealed 0.28 in 2007, 0.21 in 2008, 0.22 in 2009 and 0.23 as at June 2010.

Also, cumulatively, between 2007 and 2010 June, it is evident that 1 person got killed in every tanker/trailer crash, while the severity index is 0.23 for the period.

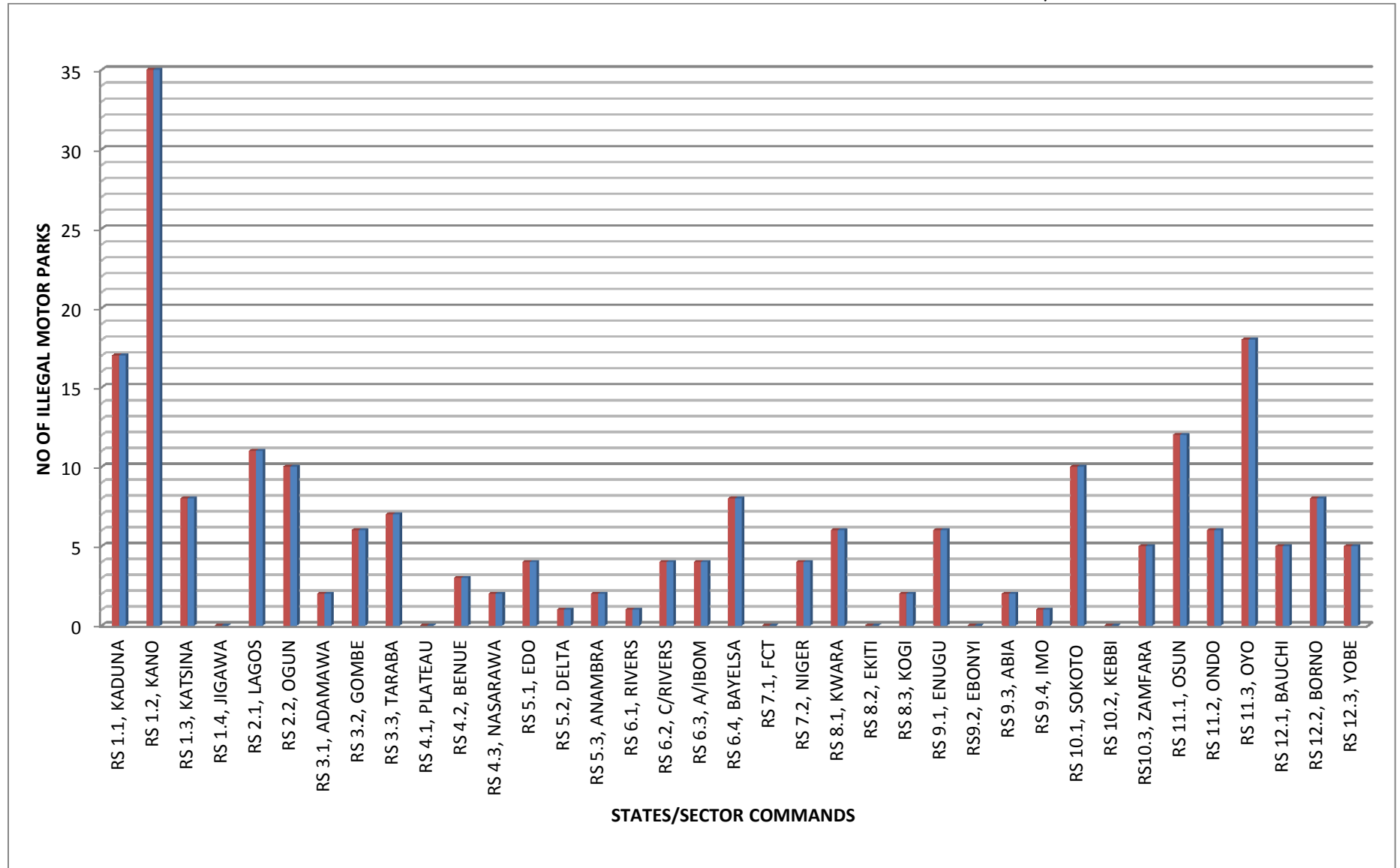
o. **ILLEGAL TRAILER / TANKER PARKS ALONG MAJOR ROUTES NATION WIDE**

Illegal Tanker/Trailer parks also constituted black spots and traffic obstructing points. A total of two hundred and fifteen (215) of such parks were identified nationwide. Kano state had the highest with 35 illegal parks representing 16.27%, while Oyo, Kaduna, Osun and Jigawa states had 18 (8.37%), 17 (7.90%), 12 (5.58%) and 11 (5.11%) respectively. (See Table 13 and Figure 13).

**TABLE 13: SUMMARY OF ILLIEGAL TANKERS/TRAILERS
PARKS**

S/NO	SECTOR COMMAND	NO OF ILLEGAL TRAILERS/TANKERS PARKS
1	RS 1.1, KADUNA	17
2	RS 1.2, KANO	35
3	RS 1.3, KATSINA	8
4	RS 1.4, JIGAWA	0
5	RS 2.1, LAGOS	11
6	RS 2.2, OGUN	10
7	RS 3.1, ADAMAWA	2
8	RS 3.2, GOMBE	6
9	RS 3.3, TARABA	7
10	RS 4.1, PLATEAU	0
11	RS 4.2, BENUE	3
12	RS 4.3, NASARAWA	2
13	RS 5.1, EDO	4
14	RS 5.2, DELTA	1
15	RS 5.3, ANAMBRA	2
16	RS 6.1, RIVERS	1
17	RS 6.2, C/RIVERS	4
18	RS 6.3, A/IBOM	4
19	RS 6.4, BAYELSA	8
20	RS 7.1, FCT	0
21	RS 7.2, NIGER	4
22	RS 8.1, KWARA	6
23	RS 8.2, EKITI	0
24	RS 8.3, KOGI	2
25	RS 9.1, ENUGU	6
26	RS9.2, EBONYI	0
27	RS 9.3, ABIA	2
28	RS 9.4, IMO	1
29	RS 10.1, SOKOTO	10
30	RS 10.2, KEBBI	0
31	RS10.3, ZAMFARA	5
32	RS 11.1, OSUN	12
33	RS 11.2, ONDO	6
34	RS 11.3, OYO	18
35	RS 12.1, BAUCHI	5
36	RS 12.2, BORNO	8
37	RS 12.3, YOBE	5
	TOTAL	215

FIGURE 13: GRAPHICAL PRESENTATION OF SUMMARY OF ILLEGAL TANKER/TRAILER PARKS IN NIGERIA AS AT SEPTEMBER, 2010



D. RECOMMENDATIONS/ACTIONABLE MATTERS.

- a. The FRSC and other stakeholders should commence the Implementation of the approved "Safety Requirements/Guidelines for Tankers/Trailer Operations in Nigeria".
- b. Though, it is a bit difficult to isolate all crashes directly caused by the poor conditions of the road in the Country, some of the causes could be traceable to the bad road conditions. The FRSC should mount pressure on the governments and the relevant agencies to improve on the road conditions. Many of the hard-shoulders, where the articulated lorries are expected to pull over, when there are long queues of vehicles behind them are not motorable and some of the trucks do fall in the process. Emphasis should be placed on getting these repaired.
- c. FRSC has to enforce the maximum speed limit of 60 KPH for articulated vehicles as a great percentage - 22.40% of the total crashes were caused by Speed Violation. (25.51% in 2007, 20.72% in 2008, 18.80% in 2009 and 27.21% as at June 2010). Between 2007 and 2010 June, cumulatively, Speed Violation accounted for 907 representing 23.07% of the total crashes.
- d. Emphasis should also be placed on vehicle conditions, especially as they concern brake system and tyre condition. 17.71% of crashes were caused by a combination of tyre violations and brake failure.

- e. That dangerous driving accounted for the highest number of causes of the crashes (26.41%) means that a lot is expected to be done in terms of driver training. The haulage companies and other articulated lorry Operators should be compelled to have their drivers trained by competent authorities.
- f. It is noteworthy that the FRSC is introducing a new driver's licence. There should be strict compliance to the requirements for the issuance of commercial vehicle licence especially as it concerns articulated vehicle driver's licence.
- h. The Road Transport Safety Standardization Scheme, (RTSSS) of the FRSC, launched by the President, Federal Republic of Nigeria on 11th September, 2007, should be fully implemented. Areas of emphasis as regards articulated vehicle operators should include the establishment of the Safety Unit and appointment of Safety Officers by the Operators as mandated by Section 115 of the National Road Traffic Regulations of 2004. Drivers' recruitment and training, as well as maintenance and other Safety Policies as espoused by the National Road Traffic Regulations, 2004 made in pursuant of the Federal Road Safety Commission (Establishment) Act, 2007, should also be vigorously pursued and enforced.
- i. FRSC should intensify its public enlightenment and training programmes for both the drivers and operators of articulated vehicles .
- j. The identified routes and black spots involving tankers and trailers crashes should attract extra and immediate operational attention of the FRSC. Patrols should be intensified on the identified routes and locations.

- k. Obstruction is also a major cause of crashes involving tanker/trailers in Nigeria. FRSC and relevant agencies should intensify efforts to immediately clear the roads of obstructions especially whenever there is an abandoned broken down vehicle or there is a traffic crash.
- l. Since it may be difficult for now for an articulated vehicle Operator to adequately deploy tow vehicles to remove their broken down and crashed vehicles in every part of the country, a proper networking among the operators, whereby other operators on agreed terms are engaged to help remove such vehicles should be encouraged. This will reduce costs as well as reduce the response time to clear such obstructions. This will also enhance road safety
- m. Provision of trailer/tanker parks on major highways. The FRSC should reach out to governments and private sectors to provide conducive parks for articulated vehicles along major highways. Apart from assisting in getting the road cleared of bottle-necks created by illegal parking on the road, the establishment of such parks will also provide a good resting place for drivers after driving continuously for about four hours. Private/Public Partnership and inter-agency collaboration should be encouraged.
- n. The FRSC should ensure that no driver of articulated lorry drives more than 4 hours continuously without resting for at least 40 minutes. Provision of tanker/trailer parks and rest areas along the route will aid this. Route associations of the drivers and owners such as, the Nigerian Union of Road Transport Owners (NARTO) and National Union of Petroleum, Energy and Natural Gas (NUPENG), among

others, should be carried along in developing strategies to evolve safe road culture in the haulage sector.

- o. The Federal Government, apart from intensifying efforts to improve the conditions of the road, should also adopt the concept of intermodal coordination by resuscitating the ailing rail transport system and also improve on water and pipeline transport modes. This will reduce the pressure on the road, which presently accounts for about 90% of the total movements in Nigeria.
- p. Articulated Lorry operators should be encouraged to install vehicle tracking devices on their vehicles. This will aid proper monitoring and discourage violations of traffic regulations.
- q. Speed limiting devices should also be installed on the trucks to avoid speed violation. It is note worthy that 22.40 % of the causes of crashes were traceable to speed violations.
- r. State and local governments should also take serious interests in the safety operations of tankers and trailers in Nigeria. The states should be stricter in issuing driver's licences to the drivers. The governments should ensure that the terminals of the operators are conducive while only vehicles that are roadworthy are allowed to ply the roads.
- s. Sitting of markets on the major roads by state and local governments and non-enforcement of land use regulations as regards illegal markets operations are also of great concern that should be properly addressed by the relevant authorities.

- t. It has also been of concern, the issue of inappropriately located police and other enforcement check points on our highways. These should be properly addressed. Some local government officials also come on the federal roads to operate illegal check points to enforce certain "laws". This is illegal and should be discouraged as their operations have resulted in obstructions and crashes involving some articulated lorries on the highways.
- u. The provision on the inscription of contact telephone numbers of the operators, preferably the Safety Managers of the articulated Lorry operators, on their vehicles should be enforced. This will provide a feed-back system and hence discourages traffic laws violations. It will also help in solving the problem of some drivers illegally using their vehicles to block the road whenever there is any dispute. The owners of such vehicles could be contacted on the phones to call their drivers to order. This will also aid enforcement.
- v. The idea of "Motor boys" attached to articulated vehicles driving such vehicles illegally or graduating to become drivers without going through driving schools and licensing procedures as mandated by the laws, should be discouraged. Violators should be prosecuted.
- w. Articulated Vehicle Driver/Operators violating traffic laws or involved in crashes should be prosecuted. Victims or relations of crash victims should be encouraged and supported by the FRSC and the Legal Aid Council and other relevant authorities to initiate civil cases against the culprits. This will serve as deterrence.

- x. The government at different levels should restrict movement of articulated vehicles on certain routes to certain time of the day, depending on the local situation.
- y. Articulated Lorries are like "Christmas trees" in the night in many developed countries, based on many lights and reflective tapes on them. This should also be encouraged in Nigeria. There should be proper lighting system as well as adequate reflective tapes/reflectors to make the vehicles quite visible at nights.
- z. Since overloading is also a major cause of crashes involving articulated trucks on Nigeria roads and the deteriorating effect of overloading on the road is visible, there is need to have installed on major Nigerian roads, weighbridges to ensure that vehicle operators comply with the loading regulations. There is the need to increase the fines from N100:00 (One Hundred Naira) by the Ministry of Works or N10,000:00 (Ten Thousand Naira) only as stipulated in the FRSC (Establishment) Act to N50,000:00 (Fifty Thousand Naira) only. Overloaded Trucks should also have their journeys terminated at the arresting points.
- aa. Smoky vehicles with their poor visibility issue also cause crashes, especially in the night. The relevant smoke emission regulations should be properly adhered to and enforced.
- ab. Illegal Parks: The report also identified two hundred and fifteen (215) illegal tanker/trailer parks across the country. These parks should be relocated where necessary while some could be improved upon and make legal parks where also applicable.

- ac. Data collection on RTC involving tankers/trailers should be improved upon by all the relevant agencies. Many of the crashes may not have been properly captured.
- ad. There should be further research on crashes involving articulated lorries (tankers/trailers) in Nigeria, with a view to proffer further strategies to reduce the rate of crashes involving this category of vehicles. The Federal Road Safety Corps (FRSC) through the Safety Engineering Department in conjunction with the Policy, Research and Statistics department should also carry out investigations on the identified black spots and segments on the roads with high incidences of Road Traffic Crashes involving Tankers and Trailers. Findings and recommendations will assist the relevant government Ministries, Departments and Agencies, Particularly the Ministry of Works, Federal Road Maintenance Agency (FERMA) and the States to embark on remedial measures.

E. CONCLUSION

The task of ensuring safe operations of articulated tankers/trailers in Nigeria is a collective responsibility. All should be involved.

Find attached as annexes detailed data on all the recorded tanker and trailer crashes across the Country between 2007 and June, 2010 and the list of illegal tanker/trailer parks nationwide.

Thanks for the opportunities.

Kayode OLAGUNJU (Ph.D)

19th October, 2010.

CORPS COMMANDER

CORPS TRANSPORT STANDARDIZATION OFFICER,

FEDERAL ROAD SAFETY CORPS,

NATIONAL HEADQUARTERS,

PMB 125, ABUJA, NIGERIA.

Olufigaro2002@yahoo.com

rtsssfrsc@yahoo.com

ky.olagunju@frsc.gov.ng

ANNEXURE

ANNEX

- i. RECORDS OF ROAD TRAFFIC CRASHES (RTC)
INVOLVING TANKERS/TRAILERS ON STATE BASIS
IN 2007
- ii. RECORDS OF ROAD TRAFFIC CRASHES (RTC)
INVOLVING TANKERS/TRAILERS ON STATE BASIS
IN 2008
- iii. RECORDS OF ROAD TRAFFIC CRASHES (RTC)
INVOLVING TANKERS/TRAILERS ON STATE BASIS
IN 2009
- iv. RECORDS OF ROAD TRAFFIC CRASHES (RTC)
INVOLVING TANKERS/TRAILERS ON STATE BASIS
IN 2010 (January to June 2010)
- v. LIST OF ILLEGAL TANKERS/TRAILER PARKS IN
NIGERIA AS AT SEPTEMBER, 2010