



Speed Limiter and its Relevance in the Present Economy

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INTRODUCTION

Nigeria is a great country with a vibrant economy

- 180 million+ human population
- 12 million + registered vehicles
- 923,768m² total land mass
- 204,000 km of total road length



Ranked 25 in global GDP in year 2015 and ranked 26 in 2016 ranking

NIGERIA'S ECONOMY

The Nigerian economy has always been referred to as the giant of Africa (Economy& Population)

The country has been rated the richest country on the continent in terms of its GDP (USD 521 billion) since year 2014



Source: <http://answersafrica.com/largest-economies-africa.html>

S/N	Country	GDP (\$ Billion)	Per Capita (\$)
1	Nigeria	569	2700
2	South Africa	353	11035
3	Egypt	292	4282
4	Algeria	214	7095
5	Angola	131	2829
6	Morocco	107	5765
7	Libya	67	5765
8	Sudan	65	2417
9	Ethiopia	55	859
10	Tanzania	49	720

NIGERIA: TOP 60 ECONOMIES OF THE WORLD (2016 RANKING)

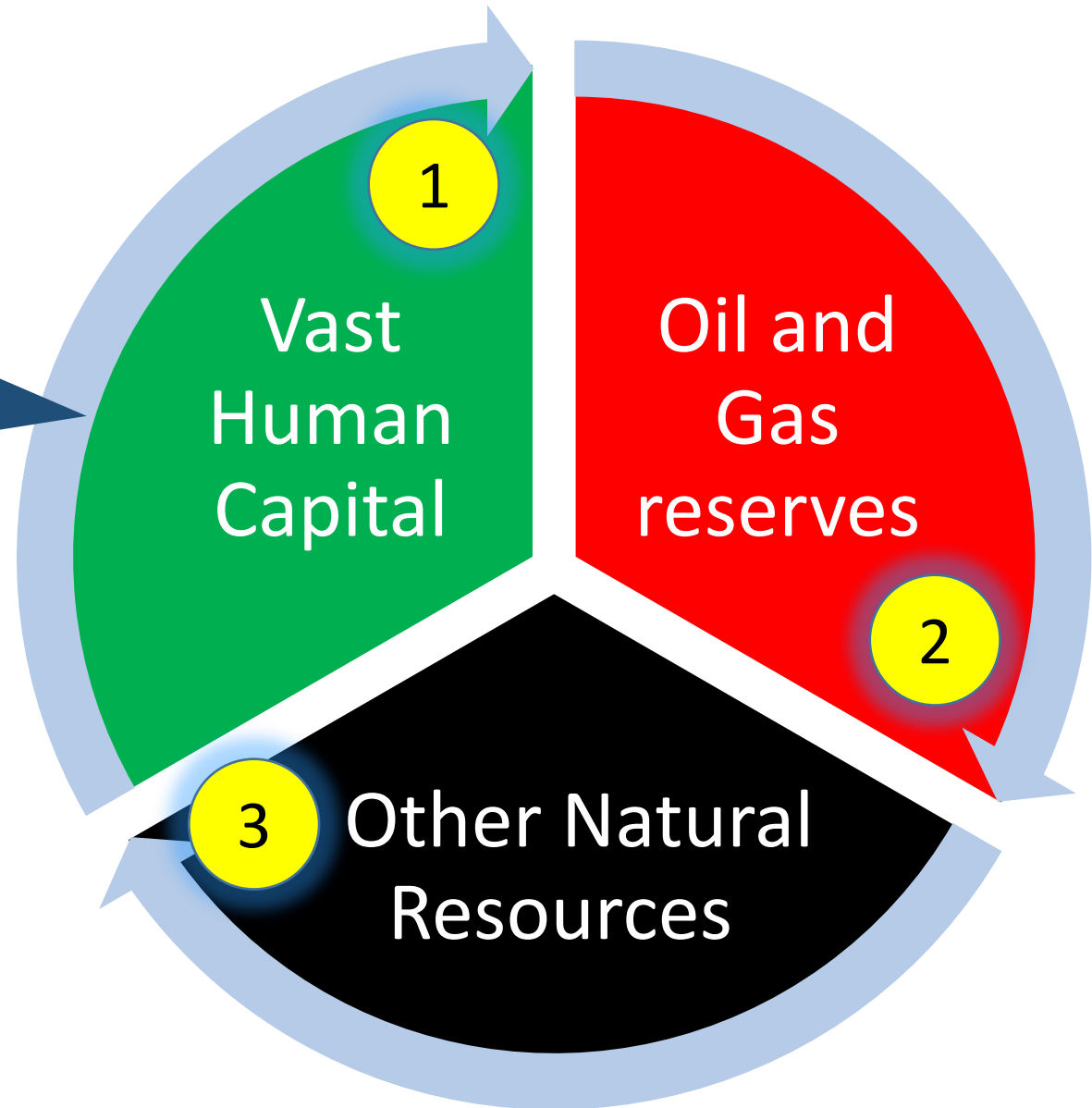
Nigeria is spotted on the 26th position on global GDP ranking

S/N	Country/Economy	2016 GDP (\$billions)	Global Ranking
1	United States	18,561.93	1
2	China	11,391.62	2
3	Japan	4,730.30	3
4	Germany	3,494.90	4
5	United Kingdom	2,649.89	5
6	France	2,488.28	6
7	India	2,250.99	7
8	Italy	1,852.50	8
9	Brazil	1,769.60	9
10	Canada	1,532.34	10
11	Korea	1,404.38	11
12	Russia	1,267.75	12
13	Australia	1,256.64	13
14	Spain	1,252.16	14
15	Mexico	1,063.61	15
16	Indonesia	940.953	16
17	Netherlands	769.93	17
18	Turkey	735.716	18
19	Switzerland	662.483	19
20	Saudi Arabia	637.785	20
21	Argentina	541.748	21
22	Taiwan Province of China	519.149	22
23	Sweden	517.44	23
24	Belgium	470.179	24
25	Poland	467.35	25
26	Nigeria	415.08	26
27	Islamic Republic of Iran	412.304	27
28	Thailand	390.592	28
29	Austria	387.299	29
30	Norway	376.268	30

S/N	Country/Economy	2016 GDP (\$billions)	Global Ranking
31	United Arab Emirates	375.022	31
32	Egypt	346.565	32
33	Venezuela	333.715	33
34	Hong Kong SAR	316.07	34
35	Israel	311.739	35
36	Philippines	311.687	36
37	Ireland	307.917	37
38	Malaysia	302.748	38
39	Denmark	302.571	39
40	Singapore	296.642	40
41	Pakistan	284.519	41
42	South Africa	280.367	42
43	Colombia	274.135	43
44	Finland	239.186	44
45	Chile	234.903	45
46	Bangladesh	226.76	46
47	Portugal	205.86	47
48	Vietnam	200.493	48
49	Greece	195.878	49
50	Czech Republic	193.535	50
51	Romania	186.514	51
52	Peru	180.291	52
53	New Zealand	179.359	53
54	Algeria	168.318	54
55	Qatar	156.595	55
56	Iraq	156.323	56
57	Kazakhstan	128.109	57
58	Hungary	117.065	58
59	Kuwait	110.455	59
60	Morocco	104.908	60

INDICATORS OF NIGERIA'S PROSPERITY

The country has remained an economic power house in Africa and the world due to its:



POTENTIALS FOR GROWTH

According to PricewaterhouseCoopers (pwc) estimation for 2050, Nigeria would be in the top ten (10) leading economies of the world due to



1

Large
Consumer
Market



2

Strategic
Geographic
Location



3

Young and
Entrepreneurial
population

THREATS TO THE PROSPERITY

The nation's economy now and the future risk being impaired due to road traffic crashes and its attendant health burden on existing and future infrastructures



MAJOR RISK FACTOR?

Although, our roads have been clearly delineated for safe speeds, they are hardly adhered to by motorists. This leads to undesirable outcomes

SPEED IN KM/HR	Built up Area	Highways	Expressways
CARS	50	80	100
TAXI and BUSES	50	80	90
TRAILERS and TANKERS	45	50	60

MAJOR RISK FACTOR?..ii

Speeding has been identified in Nigeria as one of the highest probable *“initial”* cause of most traffic crashes in the country

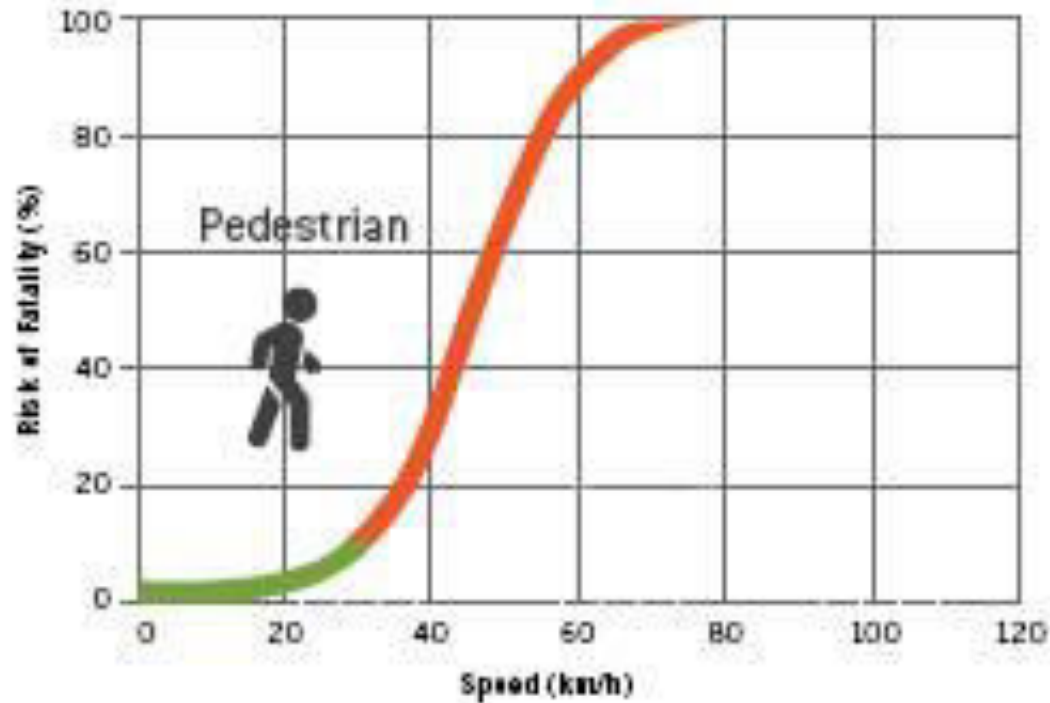
YEAR/ MOST PROBABLE CAUSE OF RTC	2012	2013	2014	2015
SPEED VIOLATION – SPV	35.2%	32.0%	30.9%	26.5%
LOSS OF CONTROL – LOC	17.5%	17.1%	20.8%	22.9%
DANGEROUS DRIVING - DGD	16.2%	12.1%	11.0%	9.4%

MAJOR RISK FACTOR?..iii

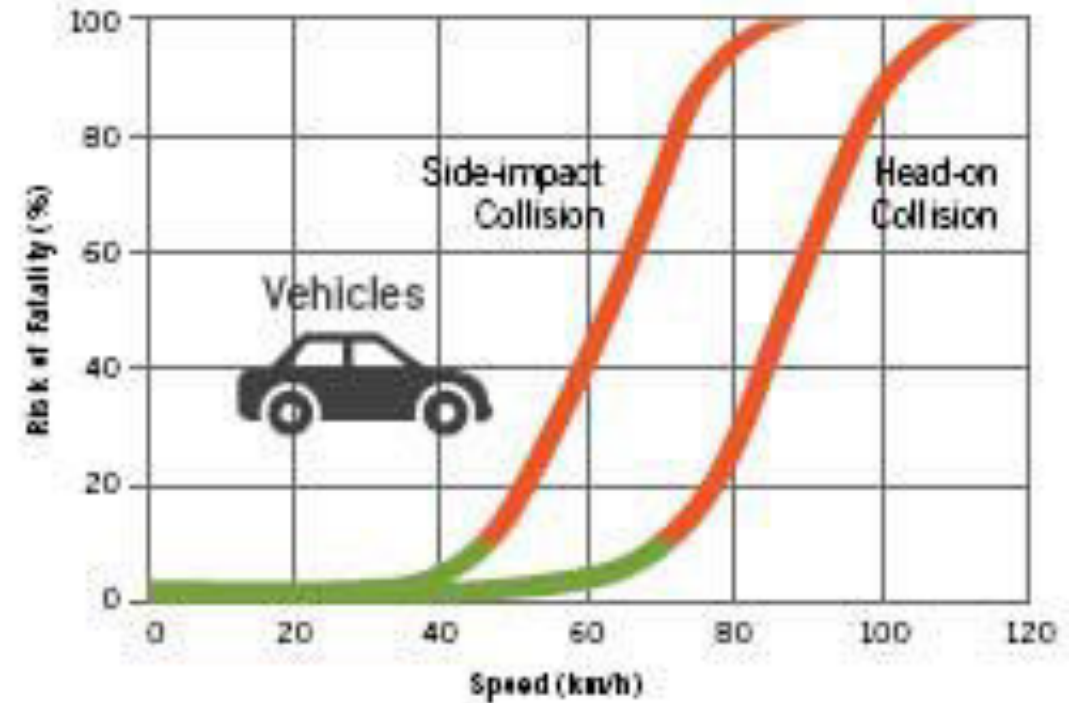
This has led to massive loss of lives, economic goods and finished products on the Nation's highways



DANGERS OF SPEED



An increase in average speed of 1km/h typically results in a 3% higher risk of a crash involving injury, with a 4%-5% increase for crashes that result in fatalities



Speed also contributes to the severity of the impact when a collision does occur. For car occupants in a crash with an impact speed of **80km/h**, the likelihood of death is 20times what it would have been at an impact speed of **30km/h**

STRATEGIES FOR HALTING SPEED

Over the years, persuasive measures on speed reduction have not yielded the much desired results

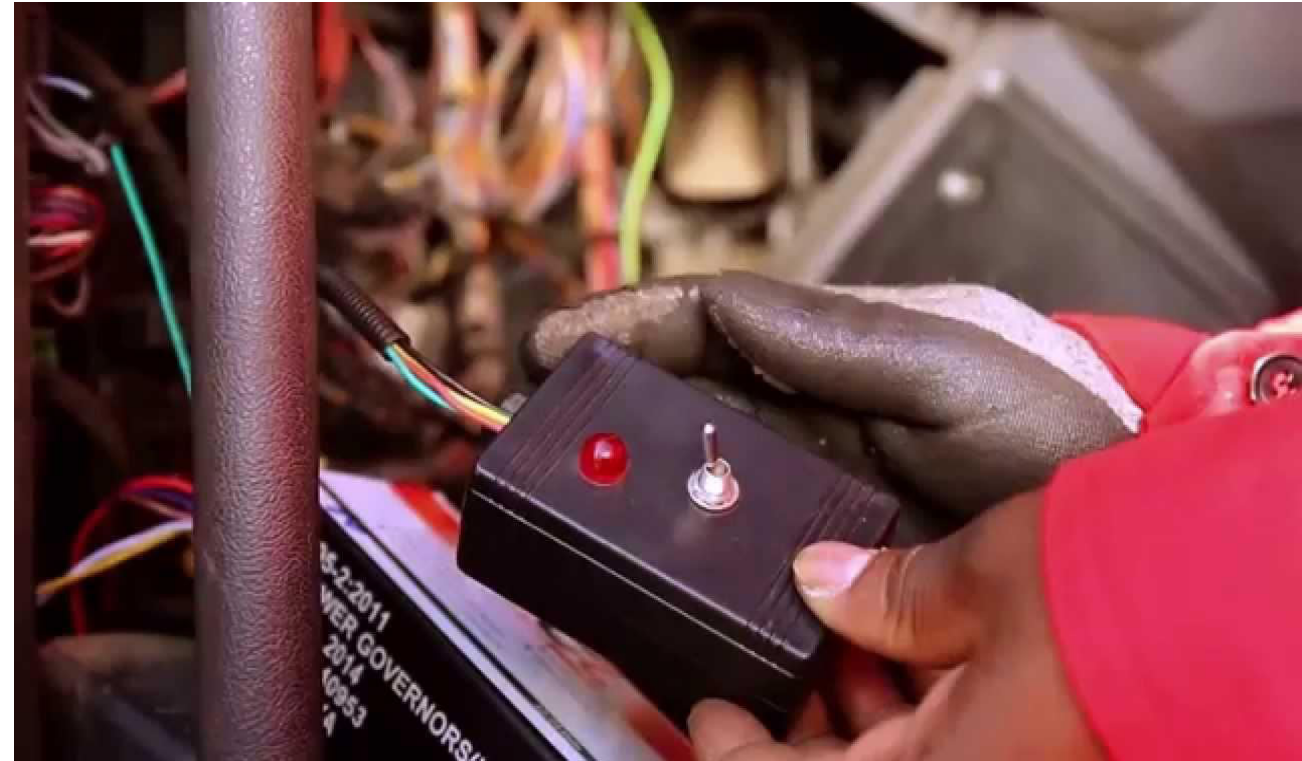
Traditional and manual methods have been observed not be that effective enough



SPEED LIMITER?

Speed limiters control the maximum speeds of equipped vehicles and are efficient and powerful tools of speed management.

Active speed limiters directly controls speed by applying counter force on the accelerator or through the engine fuel injection system



GLOBAL EFFORTS...i

EU plans to fit all cars with speed limiters

Speed Limit = 70mph
(112.6km/hr)

The new measures have been announced by the European Commission's Mobility and Transport Department as a measure to reduce the 30,000 people who die on the roads in Europe every year



GLOBAL EFFORTS...ii

USE OF INTELLIGENT SPEED ADAPTATION (ISA)

ISA is a system which informs, warns and discourages the driver to exceed the statutory local speed limit

There are three (3) types of ISA



**Informative or
advisory ISA**

**Supportive or
warning ISA**

**Intervening or
mandatory ISA**

WHY SPEED LIMITER IN NIGERIA NOW?

Numerous questions exist as to what and why the speed limiter usage in Nigeria?

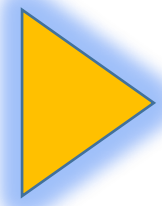
If we only know the losses speed and its consequences have on our economy, then the answer is simple



RELEVANCE OF SPEED LIMITERS IN NIGERIA

INDIVIDUALS

There is no better time in Nigeria's history than now (~~₦~~**145 per litre**), where individuals need to save money by reducing costs where necessary



Speed Limiters reduce fuel consumption as well as routine maintenance costs

RELEVANCE OF SPEED LIMITERS IN NIGERIA

TRANSPORT SECTOR

In Nigeria, speed limiters have been in the market for the past 6 years eg ABC and Peace transport companies, and this has significantly reduced RTCs

According to the Chairman ABC, since installation, his company makes colossal savings on fueling and has not recorded a fatal crash in 6 years

RELEVANCE OF SPEED LIMITERS IN NIGERIA

HAULAGE INDUSTRY

Any high speeding Heavy Goods Vehicle (HGV-trailer, tanker) is at risk any day, any time

- ▶ A loss of a new trailer is approximately \$175,000 (~~N~~ ₦ 55,209,844)
- ▶ Losses to individuals culminate in losses to the nation and the economy
- ▶ Speed Limiters can halt the losses



RELEVANCE OF SPEED LIMITERS IN NIGERIA

ENVIRONMENT

The degree of environmental degradation as a result of oil spillage and excessive smoke emission cannot be quantified



Preventing the occurrence through measures like speed limiter implementation will be best for our dear country

ADVANTAGES OF SPEED LIMITERS

1

Reduces the top speed of vehicles to a pre-set limit i.e. reduce overall crash risk and more likely to lessen the severity of crash

2

Reduces speed variability i.e. reduce lane changing and deceleration maneuvers

3

Reduces approach speeds at intersections, curves, and roundabouts

4

Lower fuel consumption and a reduction in greenhouse gas emissions

5

Lower maintenance cost(tires, brakes engines)

6

Increased road
safety(fewer casualty)

7

More relaxed driving and
lower insurance
premiums as a
consequence of less
crashes

8

Reduced cost
associated with crash
investigations

CONCLUSION

- 1 The prospect of Nigeria's economy as earlier predicted are bright
- 2 The realization of this dream hang in the balance if road traffic crashes continue to ravage its entrepreneurial youths and population who make the market vibrant and robust
- 3 It is time to embrace the speed limiter, designed to save lives and properties
- 4 The *unit cost of a speed limiter*, cannot be equated to the cost of human life, trailer or even the goods spilled on the roads



Making Nigerian roads safer, Begins with

YOU

