



## **Socio-Economic and Environmental Impacts of Trailer Parking Activities on Residents' Wellbeing in Apapa Community, Lagos State, Nigeria**

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### **Abstract**

*This study aimed at identifying the social, economic and environmental effects of trailer parking and its resultant influences on the wellbeing of residents of Apapa Local Government Area of Lagos state. This was achieved by identifying the characteristics of the residents, assessing the social, economic and environmental effects of trailer parking and examining the impacts of these effects on the wellbeing of residents and the kind of relationship existing between them. The study made use of primary and secondary data obtained from records, imagery files, maps, literature and the administration of questionnaire to residents of the community. 3 different residential zones, 5 political wards, 66 streets and 1149 buildings were identified within the study area. Multi-stage sampling was employed for the study where random sampling was used at the first stage in selecting wards within the residential zones and at the second stage, systematic random sampling was used in selecting 20% of the identified buildings in the streets. The socio-economic and environmental effects of trailer parking activities within the study area as observed included; very high level of traffic congestion and noise, poor sanitation, high level of obstruction to pedestrian movement, inadequate safety and moderate level of employment, security and rental value. The impacts of the environmental effects of these activities on the wellbeing of the residents as perceived by the respondents included stress, delay, energy wastage, inability to forecast travel time, high*

*transport fare and loss of hearing. Others were loss of sleep, eyes irritation, risk to children's health, eye defects, respiratory problems, fear/risk of accidents and security threat. The impacts of the social effects of trailer parking as observed by the respondents included the creation of potential hideouts for criminals, presence of inflammable products and aggression from drivers and motor boys while the impacts of the economic effects of these activities was the increase in the productive performance of the residents as opined by the respondents. Based on these findings, the study highlighted timing-limits, scheduling, and consideration of peak periods in determining parking spaces as salient recommendations to limit the negative effects of trailer parking and its consequential adverse impacts on the well-being of residents in the study area.*

**Keywords:** Socio-economic characteristic, Trailer park, Community, Environmental effect

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## **1. Introduction**

Globally, any city or community with an economy driven by manufacturing outputs, retail demands and consumer spending, the activities of trailers and other heavy-duty vehicles always abound in such places. This is because they provide a link between manufactured goods, retailers and consumers (George, 2011). This mode of transport also renders some benefits ranging from the ability to transport smaller loads of value-added goods irrespective of their means of arrival, wide choice of service available from various companies and the flexibility of schedules and pricing for services required compared to other modes (George, 2011). Trailer and trucking activities within any community are most noticed at some locations including trailer parks (formal and informal) and along the road sides. Trailer parks were identified in the study as spaces provided or authorized for the nonemergency parking of trailers and trucks, both public and privately operated areas.

Activities associated with trailer parking in any community can be identified economically (in terms of trade and commerce in and around trailer parks), environmentally (sanitation practices within the trailer parks), and socially (lifestyle and behavior of the residents living around the trailer parks and the trailer/truck drivers visiting the community). Some of the impacts of trailer and trucking activities that affected residents as identified in literature included the visual impact of the parked trailers and trucks, noise associated with starting and running the engine (City of tea tree gully, 2015) and the vibrations these heavy vehicles have on properties within the community, particularly the residential buildings. Other effects of trailer parking and trucking activities were the depletion of the environmental quality as associated with the washing down, maintenance and repairs of the vehicles (City of tea tree gully, 2015), and vehicular obstruction resulting from the parking of large vehicles on roadways and the manner in which they are reversed into or out of driveways.

Residents' wellbeing has often been described and illustrated in different dimensions, aspects of perception and domains. Stewart (2002) described the well-being in five different dimensions, which are, material well-being, health, education and literacy, participation in the productive sphere, and participation in the social sphere.

Also, Pollard and Lee (2003) acknowledged that well-being can be separated into five domains, namely; physical, psychological, cognitive, social and economic and Veenhoven (1988) defined two different qualities of wellbeing (inner and outer qualities) which could be both objective and subjective in nature. Based on these definitions, divisions and perceptions of wellbeing, this study made use of the subjective view of the residents to ascertain the impact of trailer parking activities on their wellbeing. The subjective view of the residents was obtained from the ratings of how pleased they were with issues raised about the community.

The activities associated with trailer parking either at trailer parks or any other part of the communities where the effects of trailer parking is felt and the resultant effects of these activities on the well-being of the residents as perceived by the sampled respondents were examined in the study. For that reason, therefore, it was necessary to identify the locations of trailer parks within the study area and the socio-economic characteristics of the residents, assessed the socio-physical and economic effects of the activities of trailer parking, examined the impacts of the identified effects on the well-being of the residents and evaluated the relationship that exists between selected socio-economic attributes and the impacts of trailer parking activities on the well-being of residents.

### **The Study Area**

Apapa Local Government with reference to Lagos State lies approximately between longitudes  $2^{\circ} 42^{\prime}E$  and  $3^{\circ} 42^{\prime}E$  and latitudes  $6^{\circ} 22^{\prime}N$  and  $6^{\circ} 52^{\prime}N$ . Being one of the 774 Local Government Areas in Nigeria, Apapa LGA was first created in 1980 during Alhaji Lateef Jakande's regime, later merged with Eti-Osa Local Government Area and re-created in October 1996 (Amole, 2015) by the administration of the late Gen. Sani Abacha. The Area is bounded by five different local government areas, namely; Lagos Island, Lagos Mainland, Surulere, Ajeromi-Ifelodun and Amuwo Odofin. The local climatic condition of the study area is occasioned by high amount of rainfall and short dry periods with temperature values being high throughout the year. The mean maximum ambient temperature values range between  $32^{\circ}C$  and  $28^{\circ}C$  in February while the minimum temperature values range between  $24^{\circ}C$  in July and  $25^{\circ}C$  in March (Amole, 2015).

Apapa Local Government inhabits the people of Ijora Oloye known as the permanent Indigene whose occupation at the earlier stage of the settlement were fishing and farming. This has however been overridden by white-collar, factory and Port jobs through the advent of industrialisation and commercialisation. The study area can be described as an industrial cum maritime/shipping area as most of the nation's earliest ports, oil companies depots and some multi-national companies such as U.A.C, Leventis, Flour Mills of Nigeria, Dangote group, S.C.O.A, BUA group among others are located within the area. These have made the Local Government Area a territory for heavy-duty vehicles, trucks and trailers. With reference to road development within the study area, about 11 Federal roads, 6 State road and 49 local roads (Apapa Local Government

Council, 2014) are available within the area although most of these roads are either in deplorable conditions or undergoing rehabilitation.

### Residents’ Well-Being

The concept of well-being may be approached from the town planning point of view. In essence, town planning is an art and science of shaping the built environment we live in with the objective of creating a comfortable, safe, convenient and healthy living environment. These provisions are planned to promote cohesion of residents and therefore the well-being of residents (Hafazah, 2008).

Scholars have offered no explicit definition of well-being, but have described, defined and illustrated the concept of wellbeing in different dimensions, view/perceptions, domains of separation and various kinds of the qualities of wellbeing. Stewart (2002) defined wellbeing in terms of five dimensions, claiming that this definition is “widely used and accepted, although with variations”. The five dimensions are: material well-being, health, education and literacy, participation in the productive sphere, and participation in the social sphere. Pollard and Lee (2003) recognised five separate domains of well-being, in their review of the child well-being literature, namely: physical, psychological, cognitive, social and economic, with each domain spanning a range of indicators, both positive and negative.

Evidence from psychology studies suggests that ratings of life satisfaction/dissatisfaction are a reasonably reliable indicator of how people feel about their lives, providing a good sense of individuals’ subjective well-being. However economists also accept the evidence from psychology studies that individuals’ expressions of life satisfaction reflect a number of different aspects of their self-perception, related to their life opportunities and outcomes. These may be both subjective and objective (“inner” and “outer” qualities), and the extent to which individuals value each of these may vary. See Table 1a.

Table 1a. Four kinds of being “well”

	Outer Qualities	Inner Qualities
Life Chances	Living in a good environment	Being able to cope with life
Life Results	Being of worth for the world	Enjoying life

Source: Veenhoven (1988)

### Living in a good environment

Politicians typically stress this concept of well-being. They stress the need to mould policy to move society towards their preconceptions of what a good living environment is like – e.g. high incomes, social inclusion, having access to culture, sport etc. This factor is determined by circumstances outside the psychological state of the individual. Economists can measure aspects of the external environment and try to measure how closely these are associated with individual responses to questions about subjective wellbeing.

### Being of worth in the world

This depends on some subjective view of what constitutes “worth” – it implies a recognition of some external standards by which it may be measured – such as service to the community (Galloway et al, 2005). These standards will inevitably reflect the individual’s own values and preconceptions of what constitutes “worth”.

### **Being able to cope with life**

Psychologists would describe this as psychological health. It may be also, of course, by influenced by physical health (Bell, 2005). Again, this does not sit easily within an economics based approach, which tends to assume that consumers and producers are rational and always able to make the best decision, given the information that is available to them.

### **Enjoying life**

Enjoyment is what is taken to be synonymous with well-being or happiness. It is essentially a utilitarian concept and perhaps come close to what economists describe as welfare – the outcome of the consumption of goods and services. It may be assumed that this is what many individuals base their assessment of well-being on, but there is no evidence of its importance compared with the other facets of well-being that have been discussed (Galloway, 2005).

Helliwell and Putnam (2004) distinguished between these two terms, explaining that: “Generally speaking, self-ratings of ‘happiness’ turn out to reflect relatively short-term, situation-dependent (affective) expressions of mood, whereas self-ratings of ‘life satisfaction’ appear to measure longer-term, more stable (cognitive) evaluations”. Diener and Suh propose a model of subjective well-being which requires measures of 3 factors: life satisfaction, pleasant and unpleasant affect. “As the term indicates, subjective well-being is primarily concerned with the respondents’ own internal judgements of well-being, rather than what policy-makers, academics, or others consider important.”

Understanding the different layers of well-being is crucial for understanding choices made by individuals and policymakers. The Deutsche Bank Research (2005) outlined the many elements in happiness and well-being and this is illustrated in the figure below. Well-being as a broader concept can be divided into material and non-material aspects (Deutsche Bank Research, 2005). The material aspect (economic well-being) is influenced by parts of GDP, by non-market activity, leisure and wealth. Unemployment and income inequality tend to reduce economic well-being. Individual living conditions also include non-material aspects such as health, life expectancy, education and the state of the environment. Happiness, as the ultimate goal, requires the most encompassing measure. This happiness depends primarily on family, friends, work satisfaction and activities. Income does not play a major role. Unfortunately, society-wide happiness – as assessed via surveys – does not change much over time (Deutsche Bank Research, 2005).

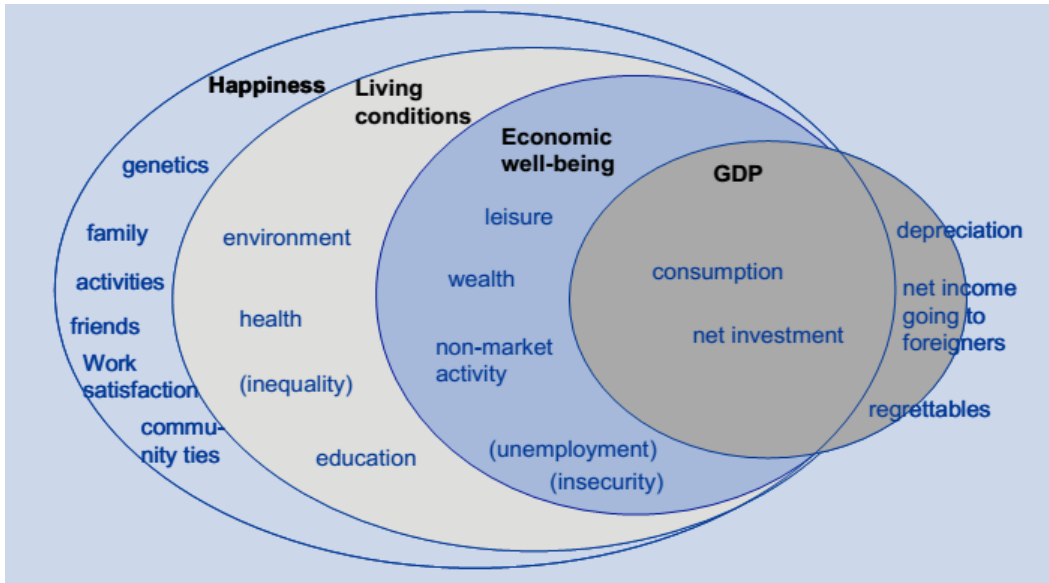


Figure 1: The many elements of happiness and well-being

Source: Deutsche Bank Research

### Effects of Trailer Parking Activities on Residents

Trailer and trucking activities can be described as deeds associated to trailer parks and trucks stops. This study identified trailer parking activities in three main dimensions, that is, the economic, social and environmental activities associated to trailer parking areas. The economic related trailer parking activities are those activities of commerce, trade, business and employment opportunities that abound in and around trailer parks within the study area. The social aspect of trailer parking activities as examined in this study involve the way of life, the behavioral and adaptive attributes of residents living around the trailer parks which are expressed in their living conditions and the co-existence among residents and trailer/truck drivers. The environmental illustration of trailer parking activities include the sanitation practices in and around the trailer parks, the physical condition of the environment as influence by the repair and maintenance of these heavy vehicles at the trailer parks and the status of physical infrastructure within the area.

The effects of trailer activities on the residents were also examined in three different perspectives (environmental, economic and social). The environmental effects of trailer parking activities include traffic congestion, noise level, sanitation practices, and visual impacts of parked trailers and the obstruction of pedestrian movement. The economic effects of trailer parking activities identified by this study include the level of employment and rental value within the area while the social effect of these activities as identified by this study include the level of safety and security within the area.

## 2. Materials and Methods

The study made use of primary and secondary data. Different methods were used in obtaining necessary information for the study. The method through which necessary information were obtained include questionnaire administration, data obtained in records and literatures and personal observation. The questionnaire was designed and administered to obtain demographic information about the residents, their perception of the socio-economic and environmental issues related to trailer activities within the community and the effects of these issues on the well-being of the residents.

The focused of this study was on the residents of Apapa Local Government Area of Lagos State and multi stage sampling was employed for the study. At the first sampling stage, the study area was stratified into three different residential zones namely the core, the transition and the peripheral zones. Table 1 shows that there are five political wards (1 in the core, 2 in the transition and 2 in the peripheral zone) and 66 streets (17 in the core, 27 in the transition and 22 in the peripheral) within the local government area (Amole, 2015). Random sampling technique was used in selecting a ward from each of the residential zones identified an implication of which is that three wards out of five were selected for sampling.

**Table 1: Wards and Buildings in Apapa Local Government Area**

WARDS	No OF BUILDINGS	NOTABLE LOCATIONS
A	443	Apapa GRA
B	151	Police, Army, Navy barracks and some other private residences
C	132	Private residences
D	Strictly commercial	Burma, commercial, Plateau, Warehouse, Creek roads
E	423	Ijora Oloye
<b>Total</b>	<b>1149</b>	

Source:Apapa Local Government Council, 2014.

As revealed in Table 2, about 423, 132 and 443 buildings were identified in the streets of the selected wards in core, transition and peripheral residential zones of the study area respectively. 20% of these identified buildings were sampled for the study which means that one out of every five buildings was selected for questionnaire administration.

**Table 2: Procedure of determining the Sample size**

Residential Zones	Wards	Selected Wards	No of Streets	Selected Streets	No of Buildingsin Selected Streets	Sampled Buildings (20%)
Core	Ward E	Ward E	17	5	423	85
Transition	Wards C&D	Ward C	27	8	132	26
Peripheral	Wards A&B	Ward A	22	7	443	89
Total			66	20	998	200



200 respondents were selected for the administration of questionnaire and they were sampled using the systematic random sampling technique. The information derived from the respondents was subjected to descriptive and inferential statistical analysis.

### 3. Data Presentation and Analysis

#### Socio-economic characteristics of residents in the study area

**Table 3: Socio-economic attributes of residents in the study area**

<b>SOCIO-ECONOMIC ATTRIBUTES</b>		<b>FREQUENCY</b>	<b>PERCENTAGE (%)</b>
Gender	Male	94	47.0
	Female	106	53.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Age	Below 20 years	10	5.0
	20-29 years	34	17.0
	30-39	61	30.5
	40-49	30	15.0
	50-59	34	17.0
	60 and above	31	15.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Educational Status	No formal education	2	1.0
	Primary/vocational training	48	24.0
	Secondary	67	33.5
	Tertiary	83	41.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Occupational Status	Student	27	13.5
	Unemployed	11	5.5
	Retired	24	12.0
	Employed	138	69.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Income	₦1,000 – ₦25,000	28	14.0
	₦25,001 – ₦50,000	61	30.5
	₦50,001 – ₦75,000	74	37.0
	₦75,001 – ₦100,000	27	13.5
	Above ₦100,000	10	5.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Duration of stay	Less than 5 years	26	13.0
	5 – 10 years	53	26.5
	11 – 15 years	67	33.5
	16 – 20 years	36	18.0
	Above 20 years	18	9.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>

The demographic information of the respondents as presented in the Table 3 shows that about 47.0% of the respondents were male while the remaining 53.0% were female. The age distribution of the respondents indicated that about 5.0% of the total respondents were below 20 years, about 17.0% fell into the age group of 20 to 29 years, 30.5% were within the age bracket of 30 to 39 years, 15.0% were in the group of 40 to 49 years, 17.0% were between ages 50 and 59 years and 15.5% were above 60 years of age among the respondents. An examination of the educational status of the respondents presents that about 1.0% had no formal education among the respondents, 24.0% had primary/vocational training, about 33.5% had secondary school education and 41.5% had the tertiary education as the educational qualification among the respondents. The occupational status of the respondents indicated that about 13.5% of the respondents were students, 5.5% were unemployed, about 12.0% were retirees and the remaining 69.0% were employed. The distribution of the average monthly income of the respondents specified that about 14.0% were earning between ₦1,000 and ₦25,000, about 30.5% were earning between ₦25,001 and ₦50,000, 37.0% were making between ₦50,001 and ₦75,000 monthly, 13.5% earned between ₦75,001 and ₦100,000 and 5.0% earned more than ₦100,000 monthly. The analysis of the respondents' duration of stay in the community present showed that about 13.0% had spent less than five years in the community, about 26.5% had spent between 5 and 10 years, 33.5% had spent between 11 and 15 years, about 18.0% had been in the community for a period between 16 and 20 years and the remaining 9.0% of the respondents had stayed in the community for more than 20 years.

#### **4. Results and Findings**

##### **4.1 Environmental Impacts of Trailer Parking Activities**

**Table 4: Environmental effects of trailer parking activities**

<b>Environmental Effects</b>		<b>Frequency</b>	<b>Percentage (%)</b>
Traffic Flow/Congestion	Very High	164	82.0
	High	34	17.0
	Moderate	2	1.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Drainage Condition	Very Good	12	6.0
	Good	50	25.0
	Fair	88	44.0
	Poor	50	25.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Noise Level	Very High	121	60.5
	High	78	39.0
	Moderate	1	0.5

	<b>Total</b>	<b>200</b>	<b>100.0</b>
Level of Sanitation	Very Good	4	2.0
	Good	26	13.0
	Fair	50	25.0
	Poor	7	3.5
	Very Poor	113	56.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Visual Quality	Very Good	6	3.0
	Good	60	30.0
	Fair	84	42.0
	Poor	43	21.5
	Very Poor	7	3.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Pedestrian Movement	Very High	74	37.0
	High	96	48.0
	Moderate	11	5.5
	Low	19	9.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

In assessing the environmental, economic and social effects of trailer parking and the associated activities with this phenomenon in the study area, the respondents perception on some identified effects were analysed. Table 4 presents how the respondents perceived the environmental effects identified within the community. Traffic congestion in the area was perceived by about 82.0% of the respondents to be very high, 17.0% perceived it as just high and about 1.0% perceived it to be moderate. The drainage condition was perceived by about 6.0% to be very good, 25.0% perceived the condition as good, 44.0% of the respondents supposed it to be fair and 25.0% perceived it to be poor. The level of noise in the community was observed by about 60.5% of the respondents to be very high, 39.0% perceived the level of noise to be high and just one of the respondents (0.5%) observed it as being moderate. The level of sanitation within the study area was seen as being very good by about 2.0% of the total respondents, about 13.0% perceived it to be good, 25.0% observed it to be fair, 3.5% perceived it to be poor and 56.5% of the respondents have a view that the drainage condition in the area is very poor. The visual quality in the area was also perceived by about 3.0% of the respondents to be very good, 30.0% observed the quality to be good, about 42.0% view it to be fair, about 21.5% had a perception of the visual quality in the area to be poor and 3.5% perceived it to be very poor. The hindrance to pedestrian movement as the last environmental effect identified in the area was perceived by about 37.0% of the total respondents to be very

high, about 48.0% observed the hindrance to be high, 5.5% observed it to be moderate and 9.5% had a perception of the hindrance to pedestrian movement to be low.

## 4.2 Economic Impacts

**Table 5: Economic effects of trailer parking activities**

Economic Effects		Frequency	Percentage (%)
Level of Employment	Very High	1	0.5
	High	30	15.0
	Moderate	73	36.5
	Low	60	30.0
	Very Low	36	18.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Rental Value	Very High	4	2.0
	High	37	18.5
	Moderate	70	35.0
	Low	47	23.5
	Very Low	42	21.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>

The perception of the residents on the economic effects of the trailer parking activities within the community is presented in Table 5. From the table, it was discovered that just one (0.5%) of the respondents perceived the level of employment within the area to be very high, about 15.0% observed the employment rate to be high, 36.5% observed it to be moderate, about 30.0% perceived it to be low and about 18.0% of the respondents had a perception the employed level to be very low. The rental value of landed properties within the area was perceived by about 2.0% of the respondents to be very high, about 18.5% observed the rental value to be high, 35.0% perceived it to be moderate, 23.5% supposed it was low and 21.0% had a perception that the rental value in the area is very low.

## 4.3 Social Impacts

**Table 6: Social effects of trailer parking activities**

Social Effects		Frequency	Percentage (%)
Safety	Good	15	7.5
	Fair	55	27.5
	Poor	70	35.0
	Very Poor	60	30.0
	<b>Total</b>	<b>200</b>	<b>100.0</b>
Security	Good	36	18.0
	Fair	118	59.0
	Poor	33	16.5
	Very Poor	13	6.5
	<b>Total</b>	<b>200</b>	<b>100.0</b>

The social effects of trailer parking in the community as perceived by the respondents as presented in Table 6 indicates that about 7.5% of the respondents described the level of safety in the area as good, about 27.5% perceived the safety level to be fair, 35.0% supposed it to be poor and 30.0% observed the level of safety within the community to be very poor. With reference to security of lives and property as another social effect of trailer parking in the community, about 18.0% of the respondents observed the security level to be good, 59.0% had a perception of security to be fair, about 16.5% had a view that the level of security is poor and 6.5% described the level of security in the area to be very poor.

**Table 7: Residents’ Perception Index Analysis of the socio-economic and environmental effects of trailer parking activities**

Category	Effects	5	4	3	2	1	Perception Weight Value (PWV)	Residents’ Perception Index (RPI)	Remarks
Physical/ Environmental Effects	Congestion	164	34	2	-	-	962	4.81	Very high
	Drainage condition	12	50	88	50	-	624	3.12	Fair
	Noise level	121	78	1	-	-	920	4.60	Very high
	Sanitation	4	26	50	7	113	401	2.01	Poor
	Visual quality	6	60	84	43	7	615	3.08	Fair
	Pedestrian movement	74	96	11	19	-	825	4.13	High
Economic Effects	Employment	1	30	73	60	36	500	2.50	Moderate
	Rental value	4	37	70	47	42	514	2.57	Moderate
Social Effects	Safety	-	15	55	70	60	425	2.13	Poor
	Security	-	36	11	33	13	577	2.89	Moderate

An evaluation of all the identified effects of trailer parking using the Residents’ Perception Index (RPI) of the ratings of the respondents on each of the effects identified is shown in Table 7. The evaluation was used to identify the significant effects within the community and it was observed from the analysis that issues such as congestion, noise level, hindrance to pedestrian movement, level of sanitation and safety were the significant effects identified within the area. Other effects such as the condition of the drainage in the area, visual quality, employment, rental value and security were perceived by the residents in the area but not at a level of high significance or severity within the community. The level of congestion and noise in the area was perceived to be very high and the sanitation and safety level were also poor within the study area.

#### 4.4 Impacts of the Socio-Economic and Environmental Trailer Parking Activities on the well-being of them Residents

**Table 8:** Impacts of the environmental effects of trailer parking activities on the residents' well-being

Effects	Impacts on Well-Being	Agreed		Disagreed	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Congestion	Stress	139	69.5	61	30.5
	Delays	175	87.5	25	12.5
	Wear and tear of vehicles	100	50.0	100.0	50.0
	Energy wastage	113	56.5	87	43.5
	Inability to forecast travel time	179	89.5	21	10.5
	High transport fare	171	85.5	29	14.5
Noise Generation	Loss of hearing	101	50.5	99	49.5
	Distraction	94	47.0	106	53.0
	Aggression	54	27.0	146	73.0
	Headache	115	57.5	85	42.5
	Loss of sleep	126	63.0	74	37.0
	Irritation	110	55.0	90	45.0
Poor Sanitation	Disease outbreak	126	63.0	74	37.0
	Irritation	160	80.0	40	20.0
	Exposure to diseases	109	54.5	91	45.5
	Reduced value of property	57	28.5	143	71.5
	Risk to children's health	156	78.0	44	22.0
Particulate Emission	Eye defects	105	52.5	95	47.5
	Eye irritation	179	89.5	21	10.5
	Respiratory problem	196	98.0	4	2.0
Hindrances to pedestrian movement	Fear/risk of accident	186	93.0	14	7.0
	Stress	82	41.0	118	59.0
	Security threat	143	71.5	57	28.5
	Loss of productive hours	42	21.0	148	79.0
	Risk to children	175	87.5	25	12.5

An examination of the impacts of the social, economic and environmental effects of trailer parking and the associated activities as presented in Table 8 indicated that

congestion impacted the well-being of the residents in form of stress, delays, energy wastage, inability to forecast travel time and high transport fare. About 69.5% of the respondents agreed that traffic congestion had stressed the residents while the remaining 30.5% disagreed on congestion bring stress to residents. Dela, another impact of congestion was supported by about 87.5% of the respondents and disagreed by 12.5%. Wear and tear of vehicles, energy wastage, and inability to forecast travel time and high transport fare as impacts on the well-being of residents was agreed upon by 50.0%, 56.5%, 89.5% and 85.5% respectively and was objected by about 50.0%, 43.5%, 10.5% and 14.5% of the respondents respectively.

The identified impacts of the level of noise generated on the well-being of the residents included the loss of hearing, distraction, aggression, headache, loss of sleep and irritation. The loss of hearing, distraction and aggression were agreed upon by 50.5%, 47.0% and 27.0% of the respondents respectively while 49.5%, 53.0% and 73.0% of the respondents respectively were not in agreement with these impacts on the well-being of the residents in the area. Other impacts such as headache, loss of sleep and irritation were agreed upon by 57.5%, 63.0% and 55.0% of the respondents respectively while it not agreed upon by about 42.5%, 37.0% and 45.0% of the respondents respectively.

The outbreak of diseases, irritation, exposure to diseases, reduced value of property and the risk to children's health were the impacts of poor sanitation that were identified. Disease outbreak, irritation and the exposure to diseases were agreed upon by about 63.0%, 80.0% and 54.5% of the respondents respectively while about 37.0%, 20.0% and 45.5% of the respondents were in disagreement with the influences of the impacts on the well-being of the residents. The reduced value of property and the risk to children's health were agreed upon by 28.5% and 78.0% of the respondents respective and it was disagreed by 71.5% and 22.0% of the respondents respectively.

The impacts of particulate emissions on the well-being of the residents included eye defects, eye irritation and respiratory problems as identified by the study. Eye defects, eye irritation and respiratory problems were agreed upon by about 52.5%, 89.5% and 98.0% of the respondents respectively while it was disagreed by about 47.5%, 10.5% and 2.0% of the respondents respectively. Also, the fear/risk of accidents, stress, security threat, loss of productive hours and the risk to children were identified as some of the impacts of hindrance to pedestrian movement on the well-being of the residents of the study area. The fear/risk of accidents, stress and security threat were agreed upon by about 93.0%, 41.0% and 71.5% of the respondents respectively while about 7.0%, 59.0% and 28.5% of the respondents respectively disagreed with the impacts of these on the well-being of the residents. The loss of productive hours and the risk to children were agreed upon by 21.0% and 87.5% of the respondents respectively while about 79.0% and 12.5% of the respondents respectively disagreed on these impacts on the well-being of the residents in the area.

**Table 9: Impacts of the economic effects of trailer parking activities on the well-being of the residents**

Effects	Impacts on Well-Being	Agreed		Disagreed	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Employment Generation	Increase performance	122	61.0	78	39.0
	Source of income	56	28.0	144	72.0
	Reduction in crime	33	16.5	167	83.5
	Alleviate poverty	31	15.5	169	84.5
Rental Value	Income generation	28	14.0	172	86.0
	Financial pressure	68	34.0	132	66.0
	Inability to pay rent	29	14.5	171	85.5
	No effect	109	54.5	91	45.5

The impacts of employment generation as one of the economic effects of trailer parking on the well-being of the residents include increase performance, source of income, and reduction in crime and poverty alleviation as identified by the study. As reflected in Table 9, the increase in performance and source of income were agreed upon by about 61.0% and 28.0% respectively while about 39.0% and 72.0% of the respondents disagreed with these impacts respectively. The reduction in crime and poverty alleviation was agreed upon by about 16.5% and 15.5% respectively while about 83.5% and 84.5% disagreed with these impacts on residents' well-being respectively. The impacts of rental value on the well-being of the residents included income generation, financial pressure, inability to pay and no effect at all as considered by this study. It was discovered that income generation and financial pressure were agreed upon by about 14.0% and 24.0% of the respondents respectively while about 86.0% and 66.0% of the respondents disagreed with these impacts on residents' well-being in the area respectively. The inability to pay rent and 'no effect' were agreed upon by about 14.5% and 54.5% of the respondents respectively while about 85.5% and 45.5% disagreed with these economic impacts within the community.

**Table 10: Impacts of the social effects of trailer parking activities on the well-being of the residents**

Effects	Impacts on Well-Being	Agreed		Disagreed	
		Frequency	Percentage (%)	Frequency	Percentage (%)
Safety & Security	Potential hideouts for criminals	131	65.5	69	34.5
	Poor or no illumination	82	41.0	118	59.0
	Presence of inflammable products	181	90.5	19	9.5



	High risk of accidents	198	99.0	2	1.0
	Aggression from drivers and motor boys	101	50.5	99	49.5

The impacts of safety and security on the well-being as identified in this study was that about 65.5% and 41.0% agreed that there had been potential hideouts for criminals and poor or no illumination respectively while about 34.5% and 59.0% disagreed on these impacts within the area. Table 10 shows that the presence of inflammable products, high risk of accidents and aggression from drivers and motor boys were agreed upon by about 90.5%, 99.0% and 50.5% of the respondents respectively while about 9.5%, 1.0% and 49.5% disagreed on the impacts of these issues on the well-being of the residents within the community.

**Table 11: Relationship between mobility and the congestion from trailer parking**

Correlations		Mobility
Congestion from Trailer Parking	Correlation Coefficient	-0.074
	Level of Significance (2-tailed)	0.000

Table 11 reflects the relationship between mobility and the congestion from trailer parking in the study area. The correlation analysis used to examine the relationship between traffic congestion and the mobility within the area presented the correlation as a weak negative one with a correlation coefficient of -0.074. This implied that the higher the level of traffic congestion within the area, the lower the mobility. The relationship was also significant considering the 2-tailed level of significance is less than 0.05 (i.e. 0.00)

**Table 12: Relationship between the poor sanitation from trailer parking and the environmental quality of the community**

Correlations		Environmental Quality
Poor Sanitation from Trailer Parking	Correlation Coefficient	0.059
	Level of Significance (2-tailed)	0.406

The correlation analysis between the environmental quality within the area and the poor sanitation from trailer parking activities in Table 12 showed a weak positive correlation (correlation coefficient of 0.059). This meant that the lower (poorer) the level of sanitation within the community, the lower the environmental quality of the area. The correlation between these effects of trailer parking was however insignificant owing to the fact that the level of significance was greater than 0.05 (i.e. 0.406).

**Table 13: Relationship between the employment generation from trailer parking and the income of the residents**

Correlations		Income
Employment Generation from Trailer Parking	Correlation Coefficient	0.061
	Level of Significance (2-tailed)	0.000

In Table 13, the relationship between the level of employment generation from trailer parking within the study area and the income of the residents was a weak positive correlation with a correlation coefficient of 0.061. The implication of this was that the higher the level of employment generated from trailer parking, the higher the income level of the residents of the community. The correlation was also found to be significant at 0.00 level of significance.

## 5. Conclusion and Recommendations

The environmental and socio-economic effects of trailer parking activities on the residents of Apapa, was evaluated in this study. The findings from the study indicated that the environmental effects of the activities associated to trailer parking within the study area were the most significant as perceived by the respondents. Effects such as congestion, noise and the hindrances to pedestrian movement within the study area were observed to be high within the community whose impact on the residents' well-being include stress, delay, energy wastage, inability to forecast travel time, high transport fare and loss of hearing. Others were loss of sleep, eyes irritation, risk to children's health, eye defects, respiratory problems, fear/risk of accidents and security threat. Also, the level of safety of lives and properties within the community was discovered to be alarming as it was perceived to be poor while the rates of employment, rental value and the level of security were observed to be other socio-economic effects of trailer parking activities perceived to be moderate by the residents. The impacts of these on the well-being of the residents were; the creation of potential hideouts for criminals, presence of inflammable products and aggression from drivers and motor boys and the increase in the productive performance of the residents as opined by the respondents.

Based on these findings, it was recommended that consideration should be given to traffic peak periods and places in the location of formal and informal parking spaces, use of time limit which trucks/trailers can use at parks and the scheduling of activities by different producers and marketers such that different time can be apportioned to them in bringing in trucks and trailers into the study area.

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