Evaluating Intra-Urban Transportation and Gender Travel behaviour in Ilorin, Nigeria

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Abstract

The condition of intra-urban transport system in Nigerian cities is becoming worrisome by the day. Although the situation affects male and female, previous empirical and theoretical discussions most of the time assumed the universality of gender?s experience. Transportation Planning and Engineering have been gender neutral. It is against this background that the study evaluates condition of intra-urban transport and gender travel behaviourin Nigeria using Ilorin as case study. The study uses primary data, which were obtained through a random and systematic sampling of 500 households in Ilorin, Nigeria. Variables used for this study include indicators of urban transport infrastructure conditions and intra-urban travel patterns. Data collected were analyzed using descriptive statistics in form of cross tabulation and chi- square statistics. The results showed inadequate and poorly maintained transport infrastructural facilities; accidents; waiting for long periods at the bus stops; traffic congestion and the related parking problems. It was also revealed in the study that man and woman are not equal urban space users and actors, in relation to kind of trips made and complexity of trip making. The study recommends among others the need to develop transportation planning models that capture gender differences in trip purpose, frequency and distance travel, mode of transportation used and complexity of trip making. Improving safety on the street isvery crucial. Routes should connect homes with other activity centers. The study concludes by reiterating the need to boost the current state of transport infrastructure in the study area.

Index terms— ntra-urban, transportation, gender, travel behaviour.

1 Introduction

growing body of academic literature has emerged over the last few years addressing the complex relationships between transportation and gender, both in developed **??**Rosembloom, 1993;Hanson and **??**anson,1978 and **??**985; **??**enkins and Gregory, 1991; **??**eters, 1999;Schintler, 2001; **??**ones, 1990) and developing countries (Turner and Fouracre, 1995; Fernando, 1997;Grieco andTurner, 1997 and **??**rieco et al, 1996;Oyesiku and Odufuwa, 2002;Okoko, 2007; **??**dufuwa, 2007; **??**verton, 1994; **??**siyanbola, 2007). Matalon **??**1992) confirmed that, the travel behaviour of individuals is not uniform and he attributed this difference to sex (gender). Okoko (2007), expatiate further that, difference in travel behaviour of men and Author : Department of Urban and Regional Planning Faculty of Environmental Sciences Ladoke Akintola University of Technology, P.M.B.4000 Ogbomoso, Nigeria. E-mail : ibrahimrafiu1079@yahoo.com women stems on the fact that women are vulnerable to a number of factors in their choice of travel (mode or in their travel behaviour).

In Nigeria, urban transport that serves as the sinew, binding together various land uses has not only remained inefficient, it has grown over the years to be expensive and dangerous (Egunjobi 1999). In many Nigerian cities, urban transport exhibits remarkable features. Several studies have revealed these features of Nigerian

urban transport **??**Adeniji, 1993; **??**desanya, 1996; **??**desanya and Adeniji, 1998; **??**orres, 2001; **??**yesiku, 2002b **??**yesiku, , 2002b;; **??**gunsanya, 2002; **??**lukoju, 2003; **??**sita et al, 2003; **??**andu-Chikolo, 2004,).

A study by **??**adare and Morenikeji (2007) on gender bias in intra-urban trip pattern in Niger State, Nigeria, shows that, there was a remarkable difference in the travel behaviour of men and women. Also, **??**anson and Hanson (1980) noted that women travel less frequently than men and they travel shorter distances than men do and rely on bus (public transport) to a greater extent than men. Despite the transport bias against women, scholars emphasized that, there would be an increase productivity, improved nutrition and health for children and the society at large when gender discrimination against women is eliminated in terms of accessibility **??**Blackden and Wodon, 2006;Okoko, 2007).

Hitherto, every attempt at solving intra-urban mobility problems was made without gender considerations. The assumptions have always been such that the solutions are applicable equally to both men and women. In most cases, pure traditional economic variables, which ignore crucial cultural roles and the salience of the life course, are used to derive some of these solutions (Rosenbloom, 1993). Yet those missing variables are parts of our realities, which of course need to be applied in formulating any transportation policy. The place of gender has been found to be very important in effective policy formulation because man and woman are not equal urban space users and actors **??**Townsend 1991; **??**eager, 1992; **??**oser, 1993; **??**owlby et al, 1989; **??**hort, 1996; **??**tc). This study is an addition to the existing literature and an attempt to make contribution along this line.

2 Aim and Scope of Study

This study aims at assessing urban transport infrastructure condition and intra-urban travel of women and men in the city of Ilorin, Nigeria. This is with a view to understanding the situation of intra-urban transportation whether it is gender oriented or not. To achieve this, the operational objective used is the assessment of transport infrastructure condition and travel pattern of people in the study area.

3 III.

4 Literature Review a) Urbanization and Urban Transport Condition in Nigeria

The trend of urbanization and city growth in developing countries are characterized by rapidity of urban increase and a high rate of urban population growth by natural increase and migration **??**Oyesiku, 2002a). In Nigeria, urbanization has a fairly long history in its growth and development. Historical account shows that extensive urban development in Nigeria predates the British colonial administration. Early explorers, missionaries and merchants estimates of population of towns show the existence of substantial human settlements in this part of the world in the 19 th century (Mabogunje 1968). During this period, the major factors crucial to the growth and development of cities were trading, marketing and administration. The second half of the 20 th century witnessed rapid rate of urbanization and emergence of cities in various parts of Nigeria due to a number of factors among which are: introduction of wheeled transportation, particularly railway and road; categorization of settlement into hierarchical order of township; introduction of monetized economy and consequently production of cash crops and exploitation of mineral resources; continuous geopolitical restructuring, through creation of states and local governments in **??**967, 1976, 1987, 1991 and 1996,; and the industrialization process between 1960 and 1975, which was based on import substitution strategies and consumer market for imported goods and services **??**Oyesiku 2002a).

In Nigeria the pace of urbanization has been dramatic showing extraordinarily high rates of 5-10 percent per annum (Egunjobi 1999). Consequently, there has been rapid expansion of Nigerian cities" areal extent, which is now sometimes ten fold their initial point of growth (Egunjobi 1999; **??**gunsanya 2002; **??**yesiku 2002a). A crucial aspect of this is that city growth and expansion in Nigeria has been largely uncontrolled **??**Agbola, 1989; **??**gbola, 1997;Egunjobi, 1999;2002; **??**yesiku, 2002a; **??**lanrewaju, 2004; **??**tc). Consequently, the scaring and unsatisfactory situations in the cities have been increasing at an alarming rate. Egunjobi (1999:3) noted that our cities in Nigeria are not only ailing, quite a majority of them are on the verge of breathing the last breath. Several studies have shown that inadequate planning of urban landuses in Nigeria and great intensity of use of land in the urban areas has exacerbated urban problems (Filani, 1994;Egunjobi, 1999;2002; **??**yesiku 2002a; Foundation for Urban Development in **??**frica, 2006; **??**tc). The current trend in the Nigerian cities is very frustrating. Mabogunje (1968) notes that whether we think of welfare services or employment opportunities, the urban system in Nigeria today is already proving inadequate as a means of achieving the type of social order that the country desires (Foundation for Urban Development in Africa, 2006:23).

5 b) Gender and Transport

In the developed countries since the 1970s, there has been growing awareness of wide differences in the ways in which men and women travel **??**Beuret, 1991).This increasing awareness is from studies carried out on women and transportation. Highlight of some of these research findings in the developed countries included the following:). ? Women"s entry into the workforce, along with their continued role as primary caretakers of domestic responsibilities, has led to the emergence of? Women"

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"knock-on" trips, or trips generated by the substitution of home production for market production. Women are more likely than men to make these types of trips. (Rosenbloom 1993;Schintler, 2001). ? Complex travel behavior such as trip chaining is more common for women than men even when both males and females are in employment. Women stop more for running household errands than do men, on both inward and outward commutes and irrespective of the number of persons in a household or its structure (Root et al, 2000; Schintler, 2001). ? Married women are more likely to make a greater variety of trips for young children, and more of those trips are directly related to household responsibilities **??**Rosenbloom, 1989) ? Women frequently use public transportation for shopping and household errands and women workers combine these trips with the journey to work to save precious time (Skinner and Borlaug, 1978; Hanson and Hanson, 1978; **??**euret, 1991). ? Within the same households, men and women often have differential access to family car, where there is only one automobile, it is frequently the husband who uses it on a regular bases (Wekerle, 1980; **??**anson and Hanson, 1980; **??**euret, 1991;Rosenbloom, 1993). ? In studies of traveller information services, women are often less prone to switch routes after receiving traveller information on alternative routes. Women tended to be more conservative in their selection of travel alternatives (Abdel-Aty et al, 1996; Schintler, 2001) Historically, transportation planning and engineering have been gender neutral. The needs and responsibilities of women which now extend beyond the domestic sphere, due largely to the increase in female labour force participation play an important role in shaping their travel activity patterns, specifically, in their impact on trip purpose, frequency and distance travel, mode of transportation used, and complexity of trip making. However, as observed in the literature, transportation planning models are not designed to capture these differences (Wekerle 1980; Schintler 2001). The design of the transportation systems is such that it is primarily to carry workers to and from their jobs. Planning does not take into account the fact that the journey to work for women workers is often more time consuming, more costly, and more complicated than men"s. Women frequently use public transportation for shopping and household errands and women workers combine these trips with the journey to work to save precious time **??**Skinner and Borlaug, 1978;Hanson and Hanson 1978). Yet fare structures and the location of transit lines do not accommodate this trips pattern. In addition mothers are generally responsible for taking children to child-care facilities and picking them-up. These trips are not reflected in transportation models even though they require an extra trip twice a day, sometimes in a direction away from work, and involve additional time and money (Wekerle 1980). These models according to **??**chintler (2001:356-357), assume that each traveler"s primary concern is to minimize travel time and cost, whereas other factors such as safety, comfort, and accessibility to opportunities may be more important than travel time to many women, and that the unique circumstances and psychology of women may lead them to very different rules of travel related decision-making than men, and this behaviour cannot be accurately reflected in travel demand models based on rational behaviour and utility maximization.

In the developing countries and in Nigeria in particular, studies have shown that there are significant differences between women and men intra-urban travel behaviour (Asiyanbola 1999;2002;Fadare and Morenikeji, 2001;Oyesiku and Odufuwa, 2002). A study carried out in Abeokuta, Ogun State revealed that women linked-trips to and from work; women make more activity trips weekly than men and women and children depend heavily on public transport for their intra-urban travel (Asiyanbola, 1999). Observation in Ibadan city revealed that work trip distance is shorter for women than for men, women make domestic related non-work trips more than men and walking as well as public transport are crucial in enabling access to various activities centers; and in a household where there is one car, men use the car most **??**Asiyanbola 2002). In Niger State, Fadare and Morenikeji, (2001) found that among people without means of transport women make more trips than men, but among the group with means of transport men have a higher mean trip rate than women. Also, study by Oyesiku and Odufuwa (2002) on gender perspectives in travel behaviour of motorcycle passengers in Nigerian intermediate cities shows that females frequently use motorcycle mode for short and long distance trips more than males; the use of motorcycle has significant effects on the pattern of dressing of women and that two of every three passengers that have motorcycle accidents are women.

IV.

8 Research Methodology

The data needed for the study were generated from field survey. This was achieved with the use of structured questionnaire which was administered in the study area. Some of the variables used are the urban transport infrastructure condition which consists of road quality in terms of condition, drainage, pedestianization and parking. Other variables include condition of public transport (conventional and intermediate public transport system. The variable used to detect intraurban travel of gender as indicated by weekly trips for The Data used in the study were obtained from a cross-sectional survey of households through questionnaire administration. In this household survey, the sampling frame utilized is the total number of estimated households in Ilorin municipal area. The average household size declared for Nigeria in the result of the National Population Commission (NPC)

2006 household survey is 4.48. This was used to divide the 2006 population of each locality as defined by the NPC in the Ilorin municipal area to get an estimate of the number of households.

To make for effective and objective coverage, due to non-availability of the list of all households in each locality in Ilorin, the number of questionnaires administered in each locality was proportional to the total number of estimated households in each locality. Random Systematic Sampling was used in the selection of houses along the streets. The first house was selected by the use of random numbers and all subsequent units in the sample were chosen at uniform intervals of twenty houses. Descriptive analysis in form of cross tabulation and chi-square statistics were used to analyze the data collected. This is done with the aid of computer software program known as Statistical Package for the Social Sciences (SPSS).

9 Discussion of Findings

Concerning road condition as observed by respondents and shown in table 1, 28.6% of the roads were tarred, 8.2% were untarred, 56.8% were tarred but has developed potholes, 4.6% were not tarred but at the same time has developed potholes, while 1.8% refused to respond to our question. This shows that there is need for government to rehabilitate most of the road networks in the city. It could also be noted that poor state of road condition also subjected people to various forms of difficulties like armed robbery, vehicle deterioration etc.

Responses of the people as shown in Table 2 reveal that 38.6% of the drainage conditions were bad, 39.2% were fair, while 2.2% and 2.4% were said to be in good and very good condition. Since the drainage conditions of the study area are mostly bad, this might no doubt be responsible for the deteriorating condition of the road.

Also in table 3, it is observed that 8.0% of the respondent reported that the condition of pedestrian are bad and fair, while 1.8% said it is good. A significant proportion of 82.2% refused to respond to our question. It could be deduced that pedestrian find a place on the road but the space is basically not designed for it. This might be responsible for reasons while the respondents are not aware of the pedestrian (barrier) system.

It is also observed in table 4 that 78.2% of the respondents identified on street parking, while 3.2% noted off street parking. It could be deduced that parking system in the city of Ilorin are on street. This might not be unconnected with the fact that there is no enough provision for the off street parking which is very dangerous to the road users. In table 5, 62% of the respondents said there are bus stops in the city, 27.8% said there is no bus stop, 10.2% refused to respond. Here, the majority of the respondents declare the existence of bus stop. Most of the traffic signs in Ilorin as given by the respondents and as shown in table 6 above are route directions (93.4%), 3.2% of the respondents noticed speed limit, while none of the respondent aware of right-off-ways and children/passengers crossing as far as traffic sign is concerned.

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Volume XII Issue W XIV Version I 7 is Para-transit (96%), 0.2% of the respondent said it is mass transit, 0.6% said both of them exists, while 3.2% give no response. The same table (4.9) revealed that 6.6% of the mass transit are Articulated Buses, 4.6% are Double Decker buses. It could also be established from the table 4.9 above that majority of the Para-transit public transport system are taxi cab (63.4%), 15% are Motorcycle, 9.6% are mini bus (Hiace, Liteace & Urvan), 7.6% are Tricycle while 2.6% are other forms of Vehicles. Table 8 shows the waiting and travel time of commuters in the study area. Accordingly, it is observed that 23.4% of respondents waited less than 5 minutes before they get vehicle. Another 40% of respondents waited 5 -10 minutes, 14% waited 11 -20 minutes, 10.6% waited 21-30 minutes, while 9% and 3% of respondents waited 31-59 minutes and 1 hour & above respectively. It is observed that majority of respondents waited between 5 and 10 minutes, situation which is not too good for transportation. In table 11 majority of respondents (60%) uses between 20 and 40 minutes before getting to destinations. This is a reflection of bad transport infrastructure.(D D D D) A 2 14

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Also in the table 8, it is observed that 15% of the respondents uses less than 20 minutes before getting to their destination. Another 14.8% uses between 50 minutes and 1 hour while 8% and 2.2% uses 1hour to 2 hours and 2 hours and above respectively. The implication of this is that the travel time of people in the study area is not encouraging given that they consume long time before reaching destination. This might be due to the poor transport infrastructure condition. Source : Author"s Fieldwork, 2010.

It is observed from the table 9 that 2.4% of respondents reported that the engine of the vehicles used by public transport operators are good but clothe tearing body. Another 17.6% of them noted that the body of vehicle is good but smoke bearing engine. Only 2.2% of respondents gave account that the engine and body of the vehicle are good. Moreover, 38.6% of respondents are of the opinion that the vehicles are fairly maintained, while 39.2% of them noted that the conditions of public transport vehicles are rickety and ill maintained.

The implication of this is that services of the intra-urban transportation will be in pathetic situation as people will not enjoy their services.

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It is observed here that majority of the respondents in the study area gave accounts of the fact that the conditions of the vehicles of transports operators are noting to write home about. This explains why road worthiness of these vehicles is questionable.

13 a) Intra-Urban Travel Pattern in Ilorin

Concerning the female folk, it is observed that their travel pattern is far more differ than male counterparts. In essence, women make more activity trips weekly than men in trip purposes like childcare, personal healthcare, shopping and religious purposes.

Other activity trips which women do more are fetching water, waste disposal, social functions which include wedding ceremony and house warming, as well as visit to relatives.

14 VII.

15 Planning Implication, Policy Issues and Conclusion

This study made assessment of intra-urban transport and gender travel behaviour in Ilorin, Nigeria. The result showed unprecedented existence of urban transport problems of inadequate and poorly maintained infrastructural facilities, accidents; the relative immobility Year of the disadvantaged shown in, for instance, in waiting for long periods at the bus stops; pollution from transport; traffic congestion and the related parking problems, etc is becoming acute in the city. This is due to the city"s rapid economic and industrial developments which have resulted in the large expansion of the city"s areal extent.

The city of Ilorin, like many cities in Nigeria, has been growing in recent years in all directions without planning. Lack of physical planning in many parts of Ilorin city has contributed in no small measure. It gives rise to the almost disorganized arrangements of buildings, which in turn negates and continue to prevent the development of better sections of the city. Even in the areas, which appear to be better planned, there is no adequate provision of sidewalks to facilitate pedestrian movements. Where sidewalks exist, they are usually taken over by roadside traders (Filani 1994;Egunjobi 1999), forcing pedestrians more to walk on road pavements. According to **??**ilani (1994:188), this, in essence means constant conflicts between pedestrians and motorists. Also most of the existing roads in the city were constructed in the late 1940s and early 1950s when the city"s economic base and territorial extent were very limited (Filani 1994). At that time the major commercial and industrial activities were concentrated in a few pockets area and fewer vehicles were in circulation within the city.

Consequently, the roads are narrow, winding and lacking in pedestrian sidewalks and adequate parking facilities. The existing transport systems fall far short of the ever increasing commuter traffic demand and the complexity of intra-urban journey patterns. This has resulted in excess capacity utilization, which has contributed to the deterioration of the roads. Moreover, as there are very few organized parking lots people suffer stress in search for parking space. Vehicles and their owners are subjected to dangers in nonconventional car parks. Parking space inadequacy is the result of illegal street parking, which has already, reaches crisis proportions in the city. In addition, such vehicles parked on the streets are ready targets of thieves and reckless drivers. Vehicles are always double-parked along the verges of the main roads thereby decreasing their lane capacity. As a result, traffic congestion, "hold-ups" and bottlenecks are a common feature, particularly during rush hours.

The issue of concern therefore is to make intraurban transportation services not only affordable, accessible, safe and appropriate, but also gender sensitive. These will facilitate the achievement of the Millennium Development Goal Number 3, which is to promote gender equality and empowerment. This is because, services which are gender-sensitive would improve the potential of women to enjoy and exercise their full human rights -political, economic, social, civil and cultural; would facilitate greater equality between women and men; and would contribute to greater equity (O"Connell, 2000). To achieve this: a. Among local decision makers -elected representatives, officials, service planners, and deliverersand civil society organizations including NGOs and community-based organizations there is the need to build greater awareness of and sensitivity to gender differences as this is fundamental to developing gender sensitive services (O"Connell 2000). b. There is the need to develop transportation planning models that capture gender differences in trip purpose, frequency and distance travel, mode of transportation used and complexity of trip making. There is the need to improve public transport. This could be achieved through increasing subsidies for on import duties of vehicles, spare parts and fuels in order to reduce fares or increase services, providing more buses, staff, stations and bus stops. c. There is an urgent need for planning. That is, urban development and transport have to be pursued together at the same time. Provision of efficient public transport should precede any major housing development. d. Measures should be taken to avoiding alienation of any existing right-of-way, especially in the dense areas. A design of integrated metropolitan transport master plans with a clear vision of train, bus and taxis as well as urban motorcycle and nonmotorized transport roles is needed. e. Urban transportation policies, which emphasize accessibility, that is, reducing the need to travel, should be pursued. Such policies relate to land use planning and decentralization of activity areas and the prioritization of walking and cycling over motorized transport.

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Figure 1: A

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1

Road condition		Gender		Total
		Male	Female	
Tarred	Frequency	44	99	143
%(Row)		30.8	69.2	100
%(Column)		22.2	32.8	28.6
Untarred	Frequency	0	41	41
%(Row)		0.0	100	100
%(Column)		0.0	13.6	8.2
Tarred but has	Frequency	134	150	284
developed potholes	%(Row)	47.2	52.8	100
%(Column)		67.7	49.7	56.8
Untarred but has	Frequency	20	3	23
developed potholes	%(Row)	87.0	13.0	100
%(Column)		10.1	1.0	4.6
No Response	Frequency	0	9	9
%(Row)		0.0	100	100
%(Column)		0.0	3.0	1.8
Total	Frequency	198	302	500
%(Row)		39.6	60.4	100
%(Column)		100	100	100

X 2 = 65.837, df = 4, P<0.05 = 0.000

Source: Author"s Fieldwork, 2010

Figure 2: Table 1 :

2

Drainage condition		Gender		Total
		Male	Female	
Very good	Frequency	0	12	12
	%(Row)	0.0	100	100
	%(Column)	0.0	4.0	2.4
Good	Frequency	0	11	11
	%(Row)	0.0	100	100
	%(Column)	0.0	3.6	2.2
Fair	Frequency	83	113	196
	%(Row)	42.3	57.7	100
	%(Column)	41.9	37.4	39.2
Bad	Frequency	73	120	193
	%(Row)	37.8	62.2	100
	%(Column)	36.9	39.7	38.6
No Response	Frequency	42	46	88
	%(Row)	47.7	52.3	100
	%(Column)	21.2	15.2	17.6
Total	Frequency	198	302	500
	%(Row)	39.6	60.4	100
	%(Column)	100	100	100

X 2 = 18.383, df = 4, P<0.05 = 0.001
Source: Author"s Fieldwork, 2010

Figure 3: Table 2 :

3

Pedestrian system		Gender		Total
		Male	Female	
Good	Frequency	0	9	9
	%(Row)	0.0	100	100
	%(Column)	0.0	3.0	1.8
Fair	Frequency	13	27	40
	%(Row)	32.5	67.5	100
	%(Column)	6.6	8.9	8.0
Bad	Frequency	10	30	40
	%(Row)	25.0	75.0	100
	%(Column)	5.1	9.9	8.0
No Response	Frequency	175	236	411
	%(Row)	42.6	57.4	100
	%(Column)	88.4	78.1	82.2
Total	Frequency	198	302	500
	%(Row)	39.6	60.4	100
	%(Column)	100	100	100

X 2 = 11.833, df = 3, P<0.05 = 0.008
Source: Author"s Fieldwork, 2010

Figure 4: Table 3 :

4

Pedestrian system		Gender		Total
		Male	Female	
On street parking	Frequency	152	239	391
	%(Row)	38.9	61.1	100
	%(Column)	76.8	79.1	78.2
Off street parking	Frequency	0	16	16
	%(Row)	0.0	100	100
	%(Column)	0.0	5.3	3.2
No Response	Frequency	46	47	93
	%(Row)	49.5	50.5	100
	%(Column)	23.2	15.6	18.6
Total	Frequency	198	302	500
	%(Row)	39.6	60.4	100
	%(Column)	100	100	100

X 2 = 14.358, df = 2, P<0.05 = 0.001
Source: Author"s Fieldwork, 2010

Figure 5: Table 4 :

5

Bus Stop		Male	Gender Female	Total
Yes	Frequency	97	213	310
	%(Row)	31.3	68.7	100
	%(Column)	49.0	70.5	62.0
No	Frequency	67	72	139
	%(Row)	48.2	51.8	100
	%(Column)	33.8	23.8	27.8
No Response	Frequency	34	17	51
	%(Row)	66.7	33.3	100
	%(Column)	17.2	5.6	10.2
Total	Frequency	198	302	500
	%(Row)	39.6	60.4	100
	%(Column)	100	100	100

X 2 = 28.870, df = 2, P<0.05 = 0.000
Source: Author"s Fieldwork, 2010

[Note: AYear]

Figure 6: Table 5 :

6

Road Traffic		Gender		Total
		Male	Female	
Speed Limit	Frequency	4	12	16
	%(Row)	25.0	75.0	100
	%(Column)	2.0	4.0	3.2
Route Directions	Frequency	190	277	467
	%(Row)	40.7	59.3	100
	%(Column)	96.0	91.7	93.4
No Response	Frequency	4	13	17
	%(Row)	23.5	76.5	100
	%(Column)	2.0	4.3	3.4
Total	Frequency	198	302	500
	%(Row)	39.6	60.4	100
	%(Column)	100	100	100

X 2 = 31.491, df = 2, P<0.05 = 0.017
Source: Author"s Fieldwork, 2010
VI.

Figure 7: Table 6 :

7

Public Transport	Frequency	Percentage (%)
Public Transport		
Mass-transit	1	0.2
Para transit	480	96.0
Both	3	0.6
No Response	16	3.2
Total	500	100
Mass Transit		
Articulated Buses Double Decker Buses No Response Total	33 23 444 500	6.6 4.6 88.8 100
Para-Transit Taxi Cab Mini bus Motorcycle Tricycle Others Total	317 48 75 38 13 500	63.4 9.6 15.0 7.6 2.6 100

Source: Author"s Fieldwork, 2010
Majority of Public Transport System operating in
Ilorin Metropolis as observed in table

Figure 8: Table 7 :

8

Public Transport	Frequency	Percentage (%)
Waiting time		
Less than 5 minutes		
5 -10 minutes		
11 -20 minutes		
21 -30 minutes		
31 -59 minutes		
1 hour and above		

Figure 9: Table 8 :

9

Condition of Vehicle	Frequency	Percentage (%)
Good Engine but Bad Body	12	2.4
Good body but Bad Engine	88	17.6
Good Body and Engine	11	2.2
Fairly maintained	193	38.6
Rickety & ill maintained	196	39.2
Total	500	100

Figure 10: Table 9 :

10

Trip Purpose	0	1	2	Male 3	4	5	6	7	0	1

Generally, it is observed as shown in table 10 that there is a remarkable difference in the travel Source : Aut

behaviour of men and women in Ilorin. Accordingly, the travel patterns of male have more spread in weekdays than females. The spread is particularly noticeable in travel for work trips, children school, recreation and funeral ceremony.

Figure 11: Table 10 :

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