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Research article

# Changes in travel frequency and residential relocation following the removal of fuel subsidies in Ibadan North, Nigeria

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### **Supplementary**

## Survey on the geographical analysis of the effect of fuel subsidy removal on residential location choices in Ibadan: Ibadan north.

### Section A: Demographic and socio-economic data

1.	LGA of residence
2.	Residential area in Ibadan
3.	Age
	(a) 18–25 years (b) 26–35 years (c) 36–50 years (d) 51 years and above
4.	Gender
	(a) Male (b) Female
5.	Educational background
	(a) Primary school (b) High school (c) Bachelor's degree (d) Master's degree
	(e) Doctorate (f) others (specify)
6.	Occupation
	(a) Employed (b) Unemployed (c) Student (d) Self – employed
	(e) Retired (f) Others (Pls. specify)
7.	Household Income in Naira
	(a) 50,000 and below (b) 50,001–100,000 (c) 100,001–150,000 (d) 150,001–200,001
	(e) 200,001–250,000 (f) 250,001–300,000 (g) 300,001–400,000 (h) 400,001–450,000
	(i) 450,001–500,000 (j) above 500,000
8.	Ethnic background
Sec	ction B: Analyzing the geographical variation
1.	Where were you living before the removal of the fuel subsidy last May, 2023?
2.	· · · · · · · · · · · · · · · · · · ·
3.	Have you changed residence since fuel subsidy was removed last May, 2023?
	(a) Yes (b) No
4.	If yes, why?
	(a) To reduce transport fare (b) Due to better facilities (c) Due to cheaper rent
_	(d) To reduce the distance to work (e) Others (Pls. specify)
5.	Does the removal of fuel subsidy affect your residential location choices?
	(a) Yes (b) No

### Section C: Examining the spatial interaction pattern

- 6. When choosing a residential location, do you prioritize areas with lower commuting costs due to higher fuel prices?
  - (a) Yes, always (b) Yes, sometimes (c) No, not a priority (d) Not applicable

- 7. Have you observed any shifts in property prices in different parts of Ibadan since the fuel subsidy removal?
  - (a) Yes, prices have increased in some areas (b) Yes, prices have decreased in some areas
  - (c) No noticeable change in prices (d) Not applicable/I don't know
- 8. How has your travel behavior within and around your local area changed since the fuel subsidy removal?
  - (a) Increased frequency of travel b) Decreased frequency of travel
  - (c) No noticeable change in travel behavior (d) I haven't noticed any changes
- 9. Has transportation service improved or worsened since the removal of fuel subsidy
  - (a) Improved (b) Worsened (c) No change (d) I don't use public transportation
  - (e) Others(specify)\_\_\_\_\_

**Table S1.** Frequency of trips before the removal of the fuel subsidy last May, 2023.

S/No	Questionnaire Item	5	4	3	2	1
1	Trips to work					
2	Trips to the market					
3	Trips to worship center					
4	Trips to dependents' schools (School run)					
5	Trips to friends / social visits					
6	Trips to recreational centers					
7	Trips to social events/functions					

Note: 5 = Very Frequently; 4 = Frequently; 3 = Occasionally; 2 = Seldom; 1 = None

**Table S2.** Frequency of trips after the removal of the fuel subsidy last May, 2023.

S/No	Questionnaire Item	5	4	3	2	1
1	Trips to work					
2	Trips to the market					
3	Trips to worship center					
4	Trips to dependents' schools (School run)					
5	Trips to friends / social visits					
6	Trips to recreational centers					
_ 7	Trips to social events/functions					

Note: 5 = Very Frequently; 4 = Frequently; 3 = Occasionally; 2 = Seldom; 1 = None

**Table S3.** Effects of the removal of the fuel subsidy on the economy of respondents.

S/No	Questionnaire Item	5	4	3	2	1
	The removal of the fuel subsidy has					
1	Reduced the purchasing power of my wages/allowance					
2	Caused an increase in the prices of goods and services					
3	Led to a surge in the prices of food items and vegetables					
4	Triggered a sharp increase in transportation costs					
5	Initiated an increase in the costs of accommodation/rent					
6	Caused a surge in the prices of medications					
7	Led to a sharp rise in the prices of healthcare services					
8	Triggered an increase in the costs of dependents' school fees					
9	Initiated a surge in the costs of neighborhood security					
10	Caused a surge in the prices of recreational services					

Note: 5 = Very Significantly; 4 = Significantly; 3 = Moderately; 2 = Insignificantly; 1 = Very Insignificantly.



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