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Effects of Ongoing Road Renewal Project on Employment Opportunity in Minna Metropolis

Ojekunle Joel Ademola, Paul ThankGod
Department of Logistics and Transport Technology,
Federal University of Technology, Minna

ABSTRACT
This study assesses the effect of the ongoing road renewal project in Minna on employment. The study adopted a descriptive research design and a multistage sampling technique to select 334 respondents comprised of residents from different areas of ongoing or recently concluded road construction projects. Questionnaire was adopted as instrument for data collection while descriptive and inferential statistics were adopted for data analysis. Results revealed that the despite negatively affecting residents' job, road construction provided temporary employment opportunities for residents with a p-value of 0.001. The study recommended that compensation should be given to those who lost their jobs due to construction activities while temporarily employed staffs should be retained and transferred to other sector to ensure job continuity post construction.

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INTRODUCTION

Road infrastructure are important components of a nation that contributes significantly to not just social growth but also economic growth of a nation. According to Sackey (2023), the level of economic growth of a nation can be inferred from the quality of road infrastructure. In order to ensure quality infrastructure, series of construction activities which may include repairs, maintenance and even construction road are conducted. These projects however are resource intensive, requiring not just material resources but human resources as well.

Over the years, studies have revealed that road construction has a mixed impact on the environment, especially on the employment sector. They are characterised with having high demand for workers, labourers, equipment operators, support staff, specialists and projects managers. This leads to an immediate rise in local employment opportunities as residents within the construction environment are often prioritised for employment by the contracted construction industries. According to Lau (2024), direct employment by construction industries account for 15 – 20% of a projects' total budget in wages and benefits.

Road construction activities also result in loss of employment. This is because, during road construction, roads are often temporary closed, crippling the ability of residents or people to reach their offices (Kahangirwe & Vanclay, 2024). This limitation to accessibility also tends to reduce patronage, often having negative impact on the revenue of businesses and organisations affected. This might lead to the temporary closure or suspension of business activities which might lead to loss of employment. Also, road construction activities often result in demolition of structures such as roadside stalls and business. This displaces the businesses, forcing them to relocate to other locations or at worst scenario, terminate or halt services rendered.

LITERATURE REVIEW

Influence of road construction on employment

While several studies have assessed the economic impact of road construction or construction activities, very few have been conducted to specify on the impacts on employment. Studies such as (Bell & Feielson

Corresponding author: Ojekunle Joel Ademola
i.ojekunle@futminna.edu.ng
Department of Logistics and Transport Technology, Federal University of Technology, Minna.

1990) indicated that road construction influenced employment and productivity; (Alade 2020) stated that road construction resulted in increased unemployment due to business displacement while (Ajiboye and Afolayan 2009) stated that improved road infrastructure led to increased employment opportunities in rural areas.

The social, spatial, and economic impacts of road construction in peri-urban regions of Kisumu, Kenya, and Accra, Ghana, were examined by (Khanani, et al. 2020). To determine how these initiatives impacted local residents, the study used a case study methodology that integrated qualitative, quantitative, and geographical research techniques. According to the research, in the peri-urban regions that were impacted, the construction of improved roads resulted in a significant increase in the number of dwellings erected, as well as an increase in the price of land and rent. Because of this, real estate investors found these places appealing. Additional career possibilities and improved service accessibility were also mentioned as positive outcomes. Negative consequences that altered how individuals lived together and interacted with one another were also discovered by the research, including gentrification and the relocation of low-income populations to more isolated places.

The lack of land among poor individuals had worse effects indicating that the road construction primarily advantaged the rich. The results present the necessity of the combination of people-based and place-based approaches to provide the fair development of infrastructure. The research results indicate that the effect of road infrastructure on community depends on the location and socioeconomic status of the community. This shows the importance of adjusting development strategies to suit the needs of each society.

Kuncoro, et al. (2024) appraised the impacts of road infrastructure on environment within Arfai-Pami corridor within Manokwari Selatan District, Manokwari Regency in Indonesia. The study adopted a mixed-method approach that was based on positivism philosophy and used both qualitative and quantitative methods. The information was gathered through personal observations, interviews, and examination of documents in the affected areas. The research revealed that the enhancement of roads had positive impacts on accessibility and economic activity where the social and economic variables were increased by 0.365 and 0.759 respectively. Nonetheless, significant ecological effects were also observed, such as a reduction in the forest cover by 33.87%, reduced green space, reduced infiltration surfaces, and the risk of flash floods due to the change in the land use patterns and water flow.

The inquiry also established pollution, disturbance of the habitat, and erosion. Socially, road constructions influenced the lives of neighbourhoods and employment relations - some residents gained employment, others had to cope with growing living costs and agricultural land deprivation. Problems like re-settlement and payment also emerged. The authors explained that a sustainable development of infrastructure should require the holistic incorporation of the environment, social, and economic impacts, and proposed the inclusive planning that would involve the community, government, and industry partners to optimize the benefits and minimize adverse effects.

Bell and Feielson (1990) examined the linkages between transportation and economic development. They found that transportation facilities had a positive effect on employment and some indicators of economic productivity. They treated transportation services as intermediary goods in production and consumption processes. Because of economic restructuring in the US and global economies, productivity and consumption processes were constantly changing over space (Mohammed *et al.,* 2021; Nwankwo *et al.,* 2022; Yahaya *et al.,* 2023). An analysis of the linkages between transportation services and economic development under such circumstances would begin by identifying the role and potential of various sectors and functions of the economy (local, regional, or national).

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i.ojekunle@futminna.edu.ng
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METHODOLOGY

This study adopted a descriptive research design. A population of 661, 172 residents of Minna as used for the study. A multi-stage sampling technique was then adopted where purposive sampling was used to select areas with ongoing or recently completed. Residents were then selected at random within each of the identified areas. 400 questionnaires were administered to the residents in the various areas, out of which 334 were returned and used for analysis. The collected data were analysed using descriptive statistics while hypothesis was tested using one sample t-test.

RESULTS

Gender of Respondents

Result as presented in Figure 1 revealed that majority of the respondents were male accounting for 66.8% of the population while 33.2% were female. This indicates that both genders were well represented in the study even though the male were dominant.

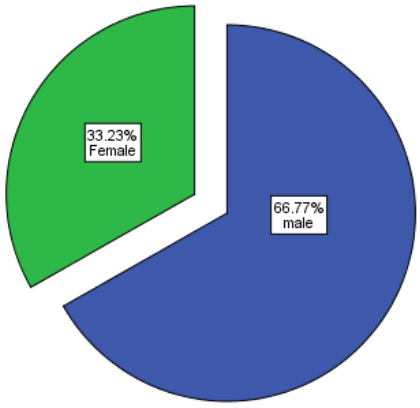

Figure 1. Gender of respondents
Source: Author's Survey (2025)

Age of Respondents

According to the information presented in Figure 2. which shows the age of the respondents. It was revealed that 7.78% of the respondents were above 49 years of age (that is, 50 and above), 9.28% were less than 20 years, 20.96% were 40 – 49 years of age, 22.75% were 20 -29 years of age while 39.22% were 30 – 39 years of age. This finding reveals that the study cuts across several age groups indicating that residents of all ages are well represented. The fact that the majority of the respondents were individuals between the age of 20 – 49 years is an indication that most of the respondents are active members of the society who are capable of carrying out one economic activity or the other.

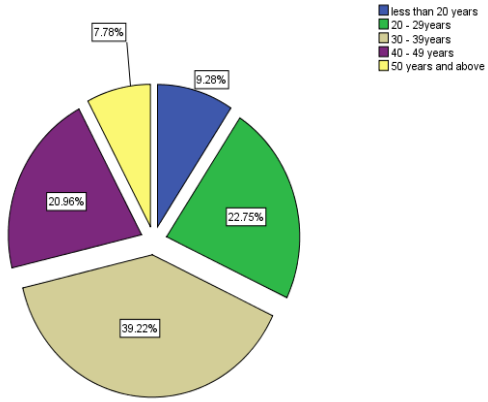

Figure 2. Age of respondents
Source: Author's Survey (2025)

Occupation of Respondent

From Figure 3, it was revealed that the respondents cut across several occupational categories. Specifically, 29.34% were private industry workers, 26.65% were government workers or civil servants, 20.96% were self-individuals or business owners, 6.59% were retirees while 16.47% were unemployed, comprising mostly of students. This reveals that majority of the respondents were employed individuals involved in one economic activity or the other. These findings implies that majority of the residents are at risk of incurring economical effect of road construction, as construction activities might affect the daily running of activities as stated by previous studies such as Imam & Ohida (2024) and Ogunseye et al. (2022).

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i.ojekunle@futminna.edu.ng
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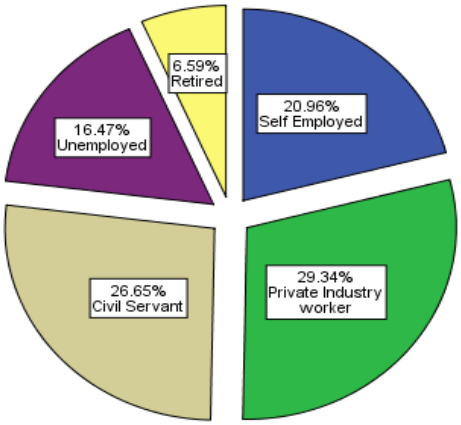

Figure 3. Occupation of respondents
Source: Author's Survey (2025)

Effects of Road Construction on Employment

Road construction has been indicated to have effects on several socioeconomic activities such as provision or even the loss of employment. According to the findings presented in Table 1, road construction activities had an average impact on employment with a mean value of 3.45. The construction project had both positive and negative influences on employment. Specifically, the positive influence of road construction project included the creation of employment opportunity for residents (= 3.79), increased demand for labour (= 2.30) and encouraging the creation of new business due to improved infrastructure (= 2.99). The employment opportunity created were however mostly temporary (= 4.26) while also resulting in the loss of some existing jobs (= 4.05) which could be as a result of damage or closure of businesses or the reduced accessibility to work.

Table 4.3. Influence of Road Construction on Employment

S/No	Statements	N	Mean	S.D
1.	Road construction has created employment opportunities for residents.	334	3.79	1.155
2.	Employment opportunities created were mostly temporary.	334	4.26	.737
3.	There was an increase in the demand for labour during construction.	334	2.30	1.188
4.	The road project led to the loss of some existing jobs.	334	4.05	.976
5.	The improved road infrastructure has encouraged new businesses that generate jobs.	334	2.99	1.429
	Grand mean		3.45	1.09

Source: Author's Survey (2025)

The predominance of temporary job opportunities and the loss of existing jobs is an indication that despite the ability of road construction projects to provide jobs due to the increased need of labour during construction processes, the created jobs lack security and continuity at the end of the project. This implies that the road construction projects might not have long term contribution to employment generation and stability in Minna. This therefore calls for the creation and implementation of targeted policies to ensure job retention through the redirection of workforce to other sectors.

Hypothesis

H_{01}: Road Construction Activities Has No Significant effect on Employment Generation

A one-sample t-test was conducted to test the effect of road construction on the creation of employment opportunity. The result as presented in Table 2 revealed a t-value of 12.464 (df= 333, $p < 0.05$). The test value was set at 3 (the neutral point on a 5-point Likert scale). The mean difference was 0.787, with a 95% confidence interval ranging between 0.66 and 0.91, and a standard deviation of 1.16. Since the mean score (3.79) is significantly greater than the neutral test value of 3, the finding indicates that respondents generally agreed that road

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construction has contributed positively to employment opportunities for residents in Minna.

Table 2: One Sample t-test on the effect of road construction activities on creation of employment opportunities

Test Value= 3	t	df	Sig. (2-tailed)	SD	Mean Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Employment Opportunities Creation	12.464	333	.000	1.16	.787	.66	.91

Source: Author's Computation (2025)

The implication of this result is that ongoing road construction projects not only enhance infrastructure but also generate socio-economic benefits through job creation for local residents. The significant increase above the neutral point reflects that community members are experiencing tangible gains in terms of labour opportunities, which could include direct construction jobs, supply of materials, food vending, transportation services, and other ancillary employment. This suggests that road projects contribute to short-term poverty reduction and improved livelihoods. However, this result taken with the result presented in Table 1 indicates that road construction also contributed to the loss of employment opportunities and in situation where the opportunities were created, they were mostly temporary.

These findings are in agreement with Kuncoro, *et al*. (2024) who established that road construction had mixed effects on employment, promoting employment generation in some cases while leading to lose of employment in others. It is therefore necessary that policymakers and project managers endeavour to strike a balance between the negative and positive effects of construction activities by ensuring that those affected negatively are compensated while prioritising local labour engagement in future infrastructure projects to maximise socio-economic benefits within host communities.

CONCLUSION

The research determined that the road construction projects helped in generating job opportunities especially in the construction process both directly and indirectly by providing direct and indirect employment through material supply, transportation, food selling, and other supporting services. Although these short-term benefits in terms of employment were evident, the study also noted that majority of the jobs formed were not permanent and they were not likely to be maintained, once the projects were over. This indicates that road construction might also lead to short-term poverty elimination and the improvement of livelihoods but does not imply the long-term employment security or the economic empowerment of the host communities. The results, thus, reflect a two-fold socio-economic effects when building roads generates a short-term job-creation effect but also, at the same time, causes job losses and economic imbalance after construction of the projects.

In order to achieve sustainable long-term employment for residents, it is recommended that a portion of the workforce should be retained after the conclusion of the project and employed to carry out maintenance activities on the constructed roads. Others could be employed or transferred to other sectors of the economy such as agriculture, manufacturing or urban service provision in order to ensure continuity. It is also recommended that local immediate community members should be prioritised when recruiting workers for local labour during construction projects. Finally, residents who might have lost their jobs as a result of the construction activity should be identified and properly compensated.

Corresponding author: Ojekunle Joel Ademola
i.ojekunle@futminna.edu.ng
Department of Logistics and Transport Technology, Federal University of Technology, Minna.

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