

Population Growth as a Catalyst for Transportation Capital Financing in Dar es Salaam, Tanzania

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ABSTRACT: This research study determined the population growth as a catalyst for transportation capital financing in Dar es Salaam, Tanzania. In achieving the targeted objective, the researcher examined how population growth influences the transportation capital financing through population distribution and population structures variations specifically in Dar es Salaam. Demographic transition theory guided this study and quantitative method was employed for data collection. Primary data was collected through using structured questionnaires while secondary data collected from statistical data and published public population and transportation reports. Simple random sampling was employed in collecting a sample of 400 respondents from Kinondoni, Ilala, Temeke, Ubungu and Kigamboni districts in Dar es Salaam. Statistical Package for Social Science Version 23 was employed to inter collected sample data then descriptive statistics and inferential analysis outputs were obtained. Moreover, analysis of variance (ANOVA), correlation analysis and multiple regression analysis was done. The findings from the analysis revealed that transportation capital financing in Dar es Salaam has been significantly improved due to population growth. The research study results showed that population growth affected transportation development, causing inadequate and insufficient of the available transport infrastructures, increasing congestions in all roads, road jam and passenger destiny delays, increased travel time and travel cost to passengers and vehicles running cost. Additionally, the increase population growth structures changes in terms of gender, ages and density has increasing transportation demands suiting to improved transportation capital financing from investors. The study concludes that increasing population growth provides a positive alert to the government of Tanzania on investor's transportation capital financing. Hence, monitoring and managing population growth is inevitable. Therefore, the research study recommends the government of Tanzania to continue monitoring the population growth in all cities to encourage investor's transportation capital financing hence improving transportation development challenges.

KEY WORDS: Population growth, transportation capital financing, population distribution, population structure and transportation development.

INTRODUCTION

Population growth in urban areas continues to emerge as a significant driver of infrastructure development across cities globally. In sub-Saharan Africa, rapid urbanization is both a consequence and a cause of shifting economic, social, and spatial dynamics. These trends is exemplified by Dar es Salaam, a Tanzania's largest city and principal economic center with a growing population from approximately 2.5 million in the year 2002 to over 7 million in the year 2022. (United Nations, 2019). The projections suggesting that its population could reach over 10 million by the year 2030 signifying to be among the fastest – growing cities in Africa (Worrall *et al.*, 2019). This explosive city growth presents major challenges to urban infrastructures, particularly in the transportation sector(s), which has been struggling to keep pace with rising demand for this revealing mobility. Transportation system in Dar es Salaam city has long suffered from limited public transport options, congestion and inadequate infrastructure planning (Mkalawa and Pan,

2014).In response to this population growth in Dar es salaam city, significant transportation capital financing have been made in water, roads and railways projects such as the Bus Rapid Transit (BRT) system which have been introduced in year 2016 aiming to provide affordable, efficient and inclusive mobility solutions. However, transportation capital financing such projects remains a major obstacle for rapidly urbanizing cities like Dar es Salaam, where fiscal constraint(s) and limited access to domestic capital markets hinder sustained infrastructure's development (Chengula and Kombe, 2017). Volpati and Barthélemy, (2019) contended that there is a potential in population growth hence would not just to be looked as a stressor, but being looked as a catalyst for mobilizing infrastructure capital finance.Larger population growth increases the demand for the tax base expansion, transportation services and can enhance the viability of innovative capital financing models such as concessional loans, public-private partnerships (PPPs) and land value

capture mechanisms (AFD, 2022). In the case of Dar es Salaam city, understanding how population growth influences the capital financing, planning and implementation of transportation infrastructure is crucial for achieving sustainable together with inclusive urban development. This research study explores how population growth trends influence infrastructure priorities, capital financing decisions and capital financing mechanisms. Through policy review and empirical analysis the study aimed to contribute to the broader discourse on Dar es Salaam city population growth, infrastructure capital finance and transport equity in rapidly urbanizing African cities at large. The question of to what extent urban transportation is affected by population growth was seen to continuous hence suggesting the need for this research study. Thus, studying population growth dynamics especially at national level become very important thing, because it helps the government to find out the measures to be taken to combat negative effect(s) of the population to transportation development.

1. LITERATURE REVIEW

Population growth in urban areas is widely acknowledged as a driver and a consequence of the seen infrastructure development, particularly in transportation sectors (Cervero, 2013). In many developing cities in Africa, population growth has been closely associated with expansion of increased capital requirements, greater institutional pressure and transport networks to improve mobility. However, the causal relationships between population increase and transportation financing that remains underexplored, particularly in African growing cities contexts such as Dar es Salaam. Moreover, Dar es Salaam's transport system has been facing critical stress due to its rapid population growth that is estimated at 5 to 6% annually growing (United Nations, 2019). Several studies have been linking this population growth to overwhelmed public transportation systems, worsening inadequate road capacity and traffic congestion (Rizzo, 2011; Mkalawa and Pan, 2014). In responses to this pressure, Dar es Salaam city initiated a large-scale transport infrastructure project which is most notably as Bus Rapid Transit (BRT) system that began operation in the year 2016. Chengula and Kombe (2017) contended that the Bus Rapid Transit (BRT) project was catalyzed by growing demand for efficient and affordable urban mobility demand directly tied to African city's surging population like Dar es Salaam. World Bank, (2015) showed that infrastructure financing for such growing cities has proven challenging for Tanzanian government authorities. Projects financing using traditional sources such as donor assistance and government budgets are increasingly become insufficient in meeting the scale need of urban transportation. Consequently, most scholars and practitioners have turned their attention to alternative capital

financing models. Public-private partnerships, land value capture and development loans have been proposed as a source and mechanisms to mobilize capital for transportation systems in rapidly growing urban cities (Suzuki *et al.*, 2015). For instance, the World Bank and the Agency Français de Développement (AFD, 2022) have financed multiple phases of Dar es Salaam's Bus Rapid Transit (BRT) often citing urban expansion and population growth as a key justification for investment.

Globally, studies such as Volpati and Barthélemy (2019) revealed that there is a positive feedback loop between urban areas growth and accessibility improved transport infrastructures in attracting population growth, which in turn do justify further infrastructure's investment. This loop implies that demographic changes may not only bring a need for transportation financing but also stand as a basis for legitimizing and mobilizing capital expenditure in government sectors. Despite seen recognitions of these demographic dynamics, there is limited empirical research that explicitly determines how population growth catalyzes transportation capital financing in Dar es Salaam city and African cities as well. For instance, Kanakala (2023) contended that capital financing enhance development in transportation which are the progressive series of growth and changes in an orderly coherent pattern toward transportation advancement, including changes in maintenance of old infrastructure features, preparation and achievement of new ones.

Tadama *et al.*, (2022) revealed that development of transport infrastructures attract both job opportunities and rapid population growth in all developing societies. Also the research study results of Konecny *et al.*, (2019) showed that the population increase changes their demand which eventually changes transportation structure demands in societies in both rural and urban areas. Most literatures focus on the challenge(s) of the outcomes of transportation investment or financing rather than on the population growth or demographic dynamics conditions that catalyzes such financial investment. The gap seen critically especially in fast growing cities like Dar es Salaam, where financing decisions and planning are often reactive rather than strategic decision.

3. RESEARCH METHODOLOGY AND MODELING

This study employed quantitative method for data collection. Primary data was collected using structured questionnaires while secondary data collected from statistical data and published public population and transportation reports. Simple random sampling was employed in collecting a sample of 400 respondents from Kinondoni, Ilala, Temeke, Ubungu and Kigamboni districts in Dar es Salaam. The population growth and transport financing model linked demographic increases to transportation capital inflows which included bus rapid

transport phases in Dar es Salaam city and commuter rail capital financing in Dar es Salaam – Dodoma phase. Data operationalizations included regression analysis and Spatial data on infrastructure rollout-corridor lengths together with station counts that were overlaid with Transportation funding data and population density maps collected from multilateral financing documents. Statistical Package for Social Science Version 23 was employed to inter collected sample data then descriptive statistics and inferential analysis outputs were obtained. Analysis of variance (ANOVA), correlation analysis and multiple regression analysis was done. Additionally, this study adopted quantitative research design supplemented by a descriptive analytical approach in examining the relationship between population growth and transportation capital financing in Dar es Salaam city. The main objective was to empirically test whether Dar es Salaam city that is experiencing population growth have received more transportation capital financing and whether this demographic trend influences the mobilization of transport’s financing. The design integrated secondary data analysis, spatial mapping, and econometric modelling.

Data were collected from multiple sources, population growth rate data were sourced from the Tanzania National Bureau of Statistics for the census years of 2002, 2012, and its projections for 2022 to 2030 (NBS, 2021). Transportation financing data was obtained from the Ministry of Work and Transport, Dar es Salaam rapid transportation (DART) Agency together with World Bank (WB) and Agence Francaise de Development (AFD) project reports. (World Bank, 2015; AFD, 2022). In finding the effect of population growth on transport capital financing, a multiple linear regressions model was employed with capital financing in transportation infrastructure as dependent variable, population growth rate as independent variable while urban expansion rate , gross domestic product (GDP), land use and ward proximity to Dar es Salaam city centre were the control variables. Moreover, using ArcGIS (10.8) geospatial analysis was conducted to visualize the distributions of transportation capital financing in relation to population growth. Hot spot analysis identified all clusters of high capital financing and high growth rate providing spatial context to the regression research study findings. The research study analytical model was

$$TCF_i = \beta_0 + \beta_1 X_1 + \alpha \quad \text{where } TCF_i \text{ stands for.}$$

transportation capital financing, x_1 stands for population growth, β_0 stands for other controlling variables which were gross domestic product (GDP), land use and ward proximity to Dar es Salaam city centre, β_1 indicating coefficient for population growth and α stands for error term. This model allowed us to determine the strength and directions of the relationships between population growth

and capital financing while controlling for urban areas structure factors.

4. RESEARCH FINDINGS AND ANALYSIS

4.1 Demographic Characteristics and Descriptive Analysis

Demographic characteristics of respondents were summarized using descriptive statistics. The perceptions of population growth and their views on transportation infrastructures and capital financing data were analyzed using statistical package for social science Version 23. Out of the 400 valid responses, 54.5% were male gender while 45.5% were female gender. In terms of age distribution, those aged 18–30 were 29.2%, aged 31–45 were 41.5%, aged 46–60 were 22.8% and above 60 years of age were 6.5%. Moreover, respondents location were proportionately distributed across 15 wards in Kinondoni, Kigamboni, Ilala, Ubungo and Temeke municipalities and their educational background revealed that, respondents whose highest level of education was primary school were 18.3%, secondary education were 47.5% and tertiary level qualifications were 34.2%. (Researcher data analysis, 2025). Research findings suggest that while respondents recognize the link between population growth and capital financing need, the perceptions of population growth in Dar es Salaam city, equity and adequacy in transportation capital financing vary considerably. The study results stipulated that 74.3% of respondents strongly agreed or agreed that Dar es Salaam’s rapid population’s growth has significantly increased the demand for transportation infrastructure capital financing, while 68.5% believed that transportation projects e.g., bus rapid transport (BRT) and feeder roads were concentrated in high-growth wards like those in Temeke and Kinondoni municipalities. Also 61.7% of respondents perceived that capital financing for transport projects was unevenly distributed across Dar es Salaam city, favoring denser areas among the five districts (ie. Kinondoni, Kigamboni, Ilala, Ubungo and Temeke) and only 34.9% of the respondents felt that their wards received adequate transportation capital financing in the last ten years. In addition to that, descriptive statistics data results shows that areas with above-average annual population growth (ie. >5%) experienced disproportionately higher per-capita transport capital financing for Dar es Salaam bus rapid transport (DBRT) corridor phases I to V totaling up to 140 km.

4.2 Inferential Analysis

Inferential statistics were employed to test two hypotheses which were null hypothesis (H_0) postulating that population growth has no statistically significant effect on transportation capital financing in Dar es Salaam city and alternative hypothesis which postulated that (H_1) population growth has a statistically significant positive effect on transportation capital financing in Dar es Salaam city. Additionally, to refine the understanding of this variable

relationship, two sub-hypotheses were proposed, the first postulating that Dar es Salaam wards with higher population growth rates received more transportation capital financing than wards with lower population growth rates (H1a) and the second postulating that population growth rates is a significant predictor of the adoption of alternative capital financing mechanisms in urban areas transportation infrastructure (H1b). The inferential statistics analysis results for tested hypothesis revealed that population growth significantly predicts the allocation of transportation capital financing. Also Inferential tests for t-tests and chi-square test confirmed significant differences with p-value being less than .05 (ie. $p < .05$) in capital financing allocations between low growth and high growth wards. Moreover, Pearson correlation analysis was conducted for the regressed population growth rate and total transportation capital financing variables across the sampled wards. The results indicated a Pearson correlation of $r=0.532$; $p<.001$; $r =$

0.532 , $\sqrt{p} < .001$; $r=0.532$; $p<.001$ which showed a moderately strong positive correlation of the two regressed variables and indicating that wards with higher population growth rates are more likely to receive greater transportation capital financing. The multiple linear regression analysis indicated that a unit percentage increase in population growth rate predicts an average unit increase in transportation capital financing. Similarly, capital financing through loans and public private partnership (PPPs) showed even stronger correlations with population growth hotspots, indicating demographic pressure drives innovative capital financing deployment.

The linear regression analysis was performed using Statistical Package for Social Science Version 23(SPSS 23) with the full dataset of 400 respondents. Table 1 summarizes the key output statistics.

Table 1: Regression Results

Predictor	Coefficient (β)	Standard Error	t-value	p-value	95% Confidence Interval
Intercept (β_0)	1.152	.289	3.99	< .001	[.580 ; 1.724]
Population Growth(PG)	.645	.087	7.41	< .001	[.474 ; .816]
Urban Density(UD)	.005	.002	2.50	.013	[.001 ; .009]
Distance to CBD	-.320	.102	-3.14	.002	[-.520 ; -.120]
Land Use Mix(LUM)	.748	.315	2.37	.018	[.127 ; 1.369]
Access Roads(AR)	.157	.076	2.07	.039	[.007 ; .307]

Model Fit:

- $R^2 = .57$ $R^2 = .57$, adjusted $R^2 = .55$ $R^2 = .55$
- $F(5; 394) = 102.14$; $p < .001$

Research data, 2025

The linear regression result shows that the model explains approximately 57% of the variance in transportation capital financing across districts in Dar es Salaam, suggesting a strong explanatory power. Furthermore, the regression results indicates ($\beta = 0.645$; $p < .001$) which shows population growth has a statistically significant positive (+vely) effect on transportation capital financing. This means that for every unit percentage (1%) increase in annual population growth, transportation capital financing increases by approximately 0.645 million of Shillings if other factors have been controlled. This result supports the hypothesis that population growth increments acts as a catalyst for transportation capital financing. The urban density on each districts is also positively (+vely) related ($\beta = 0.005$; $p = .013$), This indicates that denser districts attract more capital financing, though the effect size of the districts is smaller. The shown results align with urban areas planning theories that denser areas have higher capital financing demand and justification for transportation infrastructure (Suzuki *et al.*, 2015). Distance to central business district (CBD) ($\beta = -$

0.320 ; $p = .002$) is negatively (-vely) associated with capital financing, indicating that wards located farther from the central business district receive less transportation financing, potentially reflecting the prioritization of central urban areas. The land use mix revealed a positive (+ve) and significant effect ($\beta = 0.748$; $p = .018$) showing that wards in the districts with diverse land use patterns are most likely to attract capital financing probably due to multifunctional transportation needs. Lastly, access roads revealed to be positively influencing capital financing ($\beta = 0.157$; $p = .039$), meaning that wards in all districts with better baseline infrastructures tend to receive more capital financing which could indicate an incremental capital financing strategy in urban areas. In conclusion, the overall significance of the model confirmed that the predictors variable jointly explain transportation capital financing in Dar es Salaam city effectively ($F = 102.14$; $p < .001$).

4.3 Analysis of Variance (ANOVA)

The analysis of variance (ANOVA) was conducted to determine if there are statistically significance differences in

the transportation capital financing allocations among district's wards categorized by different level of population growth rates. The district's wards were organized into groups of three categories based on their annual population growth rates. These groups are the low growth considered to be all wards with less than 2.5% per annum (sample n = 130), moderate growth rate with 2.5% up to 4.0% per annum

(sample n = 145) and higher growth rate with greater than 4.0% per annum (sample n = 125). Table 2 shows the summary of the one-way analysis of variance (ANOVA) comparing mean transportations capital financing across the three population growth ward categories.

Table 2: One-way analysis of variance (ANOVA)

Source	Sum of Squares	Degree of freedom df	Mean Square F	p-value
Between Groups	785.923	2	392.961	15.671 < .001
Within Groups	9987.461	397	25.154	
Total	10773.383	399		

Research data, 2025

The analysis of variance ANOVA indicates a statistically significant differences in transport capital financing across the population growth rates on groups, $F(2; 397) = 15.67$; $p < .001$ $F(2, 397) = 15.67$ and $p < .001$ $F(2,397)=15.67$; $p < .001$.

Additionally, Tukey honestly significant differences Post Hoc test was conducted to identify which groups differ significantly. The results indicated that, mean transportation capital investment for the higher growth district's wards (higher = 7.82 billion TZS; sd = 2.46) was significantly greater than of low-growth district's wards (lower = 5.32 billion TZS, sd = 2.13); $p < .001$. The moderate-growth district's wards (moderate = 6.49 billion TZS, sd = 2.18) also had significantly higher capital financing than low-growth district's wards ($p = .005$) and there was a smaller, non-significant differences between high-growth district's wards and moderate-growth district's wards ($p = .087$).

The analysis of variance (ANOVA) results indicated that levels of population growth have significant effects on the allocation of transportation capital investment in Dar es Salaam city. Specifically, district's wards that experiences higher population growth receive significantly greater capital financial investment in transport infrastructures compared to lower growth district's wards. This patterns supports the research study's hypothesis postulating that population growth is a catalyst for transportation capital financing prioritization. The seen non-significant differences between higher and moderate growth ward groups suggests possible threshold effects, whereby once a district's ward's population growth surpasses a certain rate then it receives a relatively same level of capital financing investment. This could reflect government planning policies that target on both moderately and rapidly population growing areas for infrastructure's improvements. These research findings align with previous research studies emphasizing the role of demographic that pressures in shaping urban infrastructure financing priorities (Suzuki *et al.*, 2015 and World Bank,

2015) and highlights the need for transport financing strategies that address varying population growth dynamics across urban areas.

5. DISCUSSION OF STUDY FINDINGS AND IMPLICATIONS

The findings from this research study provide compelling evidence that population growth in Dar es Salaam city significantly influences transportation investment allocation across its urban district's wards. The regression analysis confirmed a strong positive (+ve) relationship between population growth in Dar es Salaam and the level of transportation capital financing, corroborating the study hypothesis that demographic pressures in urban areas act as a key catalyst for infrastructure investment decisions. This aligns perfectly with the broader literature which highlights populations growth rates as a primary driver for urban areas transport capital financing needs in rapidly expanding cities globally (Suzuki *et al.*, 2015 and Cervero, 2013).

The positive associations between urban areas density and transportation investment underscores the functions of demographic concentrations in guiding resources allocation. Densely populated districts in Dar es Salaam city tend to generate highest travel demand compared to other regions in Tanzania, which justifies larger transportation capital financing to alleviate congestion and improve mobility from one point to another (UN-Habitat, 2020). Conversely, the revealed negative (-ve) coefficient for distance to the central business district's wards (CBD) suggests a spatial biasness in capital financing favoring wards closer to economic zones, reflecting common urban areas developments patterns where central hubs receives priority infrastructures upgrades (World Bank, 2015). This spatial disparities may exacerbate inequalities in access to warrants targeted policy attentions and transportation investment decision.

Moreover, the analysis of variance (ANOVA) results showed a significant difference in capital financing levels

across districts in Dar es Salaam city categorized by population growth rates, with higher-growth districts receiving substantially more funds. The post hoc analysis suggests that while the capital financing gap between lower- and higher-growth urban areas is clear, differences between moderately and higher-growth districts are less pronounced. This may show a planning approach that broadly target all districts experiencing above-average growth rates for capital financing, irrespectively of fine-grained population growth rate differences. The positive (+ve) influence of lands use mix and existing roads access on transportation investment, highlights the multidimensional nature of capital financing decisions. Urban areas with mixed lands use may require more complex and integrated transportation solutions, attracting greater transportation funds for investment. Similarly, districts with better baselines infrastructure might be favored for incremental transportation funds for investment to maximize the impact of existing financial assets, consistent with findings from other developing urban areas contexts (Suzuki et al., 2015).

The descriptive statistics results reflect public perception trends with the majority of the study respondents recognizing population growth as driving force for transportation capital financing demand, yet significant portion perceiving uneven distribution of transportation capital financing. This respondent's perception could reflect real inequalities as well as challenges in communications and stakeholder's engagement around transport investment planning processes. These research study findings emphasize the importance of incorporating dynamic population's growth rates data into transport capital financing models in Dar es Salaam city. Urban areas planners and government policy makers should consider spatial and population growth dynamics to enhance capital financing and efficiency in infrastructure investments. Addressing the spatial disparities identification could contribute to more inclusive urban areas mobility and reduces socio-economic divides.

6. CONCLUSION OF THE STUDY FINDINGS

This research study investigated the role of population's growth as a catalyst for transportation capital financing in Dar es Salaam city, Tanzania, using a representative sample of 400 respondents across various urban areas. The research study findings clearly demonstrated that population growth in urban areas significantly influences the allocation of transportation infrastructure's investment. Specifically, in district's wards that experience higher rates of population growth receives substantially greater transportation investment capital compared to their low-growth district's wards counterparts. This relationship persist even when controlling for other factors such as urban areas density dynamics, proximity to central business districts, lands use diversity and existing roads infrastructures.

The research study analysis also reveals spatial disparities in capital financing, with district's wards closer to the Dar es Salaam city center benefiting from more substantial transportation investment, indicating an urban areas core bias in resources allocation. Additionally, study factors such as existing transportation infrastructure and land's use mix were shown to positively (+ve) affect capital financing, underscoring multidimensional nature of capital financing decisions in urban areas transport. Generally, the research study confirmed that population growth dynamics are a key determinants of transportations capital financing in Dar es Salaam city and should be integrated to urban areas infrastructures planning framework. These research study findings contributes to the broader understandings of how rapid urbanization in African cities shapes infrastructures development priorities and capital funding strategies.

7. RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

7.1 Research Study Recommendations

This sub-section points out recommendations and areas for further research of our study. It helps to link findings to practical usefulness of the study. Based on the research findings of this study, several recommendations have been proposed to improve transportation capital financing due to population growing rate in Dar es Salaam city. Firstly, considering the accelerating population growth and capita financing variables, this study recommends integrating projections of population growth into transportation planning. This enhances urban areas policymakers and planners to systematically incorporate detailed district's ward level projections for population growth into transportation infrastructures capital financing models. This approach helps to align with capital investments to urban areas more closely with actual and anticipated transportation financial demand which ensures efficient allocations of limited resources (Suzuki *et al.*, 2015).

Secondly, the research study recommends addressing spatial disparities in transportation capita financing. The observed biasness toward district's wards closer to the central business district's wards calls for deliberating policies to ensure the equitable capital financing distributions. Additionally, this research study recommends that capital financing should be balanced to support peripheral and rapidly growing district's wards, thus promoting inclusive urban areas mobility and reducing of socio economic inequalities (World Bank, 2015).

Third recommendations for this research study is to Promote lands use diversities for investments optimizations which eventually encourage mixed land use developments in increasing transportation capital financing demand sustainability and justifying more comprehensive transportation infrastructure investment. Integrating lands

use and transportation policy are expected to enhance the effectiveness of capital funds expenditures (Cervero, 2013). Fourthly, this research study recommends strengthening public participations and transparency, given the perception of uneven capital financing distribution throughout the country. This enhances stakeholder's engagement and transparency in transportation capital financing decisions in fostering trust and better reflections to community needs (UN-Habitat, 2020).

Lastly, this research study recommends on leverage innovative capital financing mechanisms. In supplementing traditional capital financing sources, Dar es Salaam city should explore innovative capital financing mechanisms such as public-private partnerships (PPPs), lands values capture (LVC) and transit oriented development's incentives which have shown success in other rapidly growing urbanizing contexts (Suzuki et al., 2015).

7.2 Areas for Further Research

This research study opens several avenues for future inquiry. Firstly, Future researcher could track population growth changes over time to better understand causality and its dynamics with capital financing patterns. Secondary, future research should incorporating variables such as employment patterns, informal settlements and income levels, can deepen understanding of capital financing allocations determinants. Thirdly, future researcher are recommended to make comparative analyses that can illuminate best practices and contextual factors influencing transportation investment in similar urban areas in Southern- Saharan Africa. Fourthly, researchers are recommended to investigate on how transportation capital financing translates into actual transport services improvements in quality and equitable accessibility across district's wards that would provide valuable insights. Lastly, this research study recommends further researchers to have empirical evaluation of innovative capital financing strategies' feasibilities and effectiveness in the Tanzanian context for guiding policy adaptation.

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