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From Resource Allocation to Mobility Outcomes: Examining the Role of Strategic Financial Configuration in Nairobi's Urban Transport System

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Brian Kiptoo Kipsang, Joyce Ndegwa & Thomas Ngui
United States International University–Africa, Kenya

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Abstract
Effective urban mobility requires more than the availability of financial resources; it also depends on how funds, grants and debt are planned, allocated, monitored and aligned with transport priorities. Anchored in the Resource-Based View and complemented by Resource Orchestration Theory, this study examined the association between strategic financial resource configuration, defined as the deliberate structuring of fund, grant and debt resources, and perceived urban mobility outcomes (safety, reliability and efficiency) in Nairobi City, Kenya. A positivist, cross-sectional descriptive correlational survey design was used. The target population comprised 765 organisational actors in 25 public, private and international development institutions. A sample of 263, computed with Yamane's formula, was allocated proportionally across the three stakeholder strata, and respondents within strata were selected purposively. Of 220 returned questionnaires (83.7%), 214 usable responses were analysed in SPSS version 30 using descriptive statistics, Pearson correlation and simple linear regression. Financial resource configuration showed a moderate-to-strong positive association with urban mobility outcomes (r = .635, p < .001) and accounted for 40.4% of their variance, $F(1, 212) = 143.42$, p < .001; B = 0.352, 95% CI [0.295, 0.409]. Planning, allocation, accountability and monitoring practices are therefore important correlates of perceived mobility performance.

Introduction
Financial resources are a foundational input for the public agencies that plan, build, regulate and operate urban transport systems. Unlike firms, these agencies do not compete for market advantage. The value of their resources lies in their capacity to deliver public services and create value for citizens and other stakeholders (Bryson et al., 2007). In Kenya, the performance of devolved governments has been linked to the adequacy and management of their financial resources (Ochola et al., 2022). The same logic applies to the agencies responsible for Nairobi's roads, public transport and road safety.

Public sector agencies employ multiple instruments to mobilise financial resources, including taxation, service fees, grants, partnerships, and emerging financing models such as green bonds (Lavitt & Sargeant, 2025). These funds provide the capital necessary to support infrastructure development, maintenance, and innovative transit solutions in metropolitan areas. However, developing economies often struggle with weak tax bases, informal economies, corruption, and political interference, all of which undermine fiscal sustainability (Orido & Atandi, 2025). Poor

revenue performance jeopardises both fiscal stability and macroeconomic growth, creating ripple effects across the urban transport sector. In East Africa, public finance is overstretched, with limited capacity to sustain operations and maintenance of completed projects (Adero & Aligula, 2012). Research shows that availability of adequate financing significantly influences the completion and timeliness of road projects (Chibole & Mbataru, 2023), which suggests that the adequacy and reliability of financial flows shape the scale and pace of mobility interventions.

Beyond mobilisation, expenditure management is central to financial configuration. Governments worldwide are pursuing fiscal reforms to enhance efficiency in public expenditure and reduce waste in project delivery (Jarbandhan & Gwiza, 2022). Optimising expenses ensures value for money, minimises cost overruns, and strengthens public trust. Appraisal tools such as cost–benefit analysis is central to transport investment decisions. However, the persistent underestimation of costs and overestimation of benefits in large transport projects shows that such tools improve value for money only when forecasts are subject to accountability (Flyvbjerg, 2009).

Kenyan evidence indicates that the adequacy and timing of financing are associated with the completion of public road projects (Chibole & Mbataru, 2023). At national level, borrowing for infrastructure is now framed explicitly in terms of cost and risk across currency, maturity and interest-rate exposure (National Treasury and Economic Planning, 2025). Nairobi, like many African cities, continues to grapple with budget constraints, delayed disbursements, and misaligned funding priorities that have affected the implementation of projects such as the Bus Rapid Transit (BRT) system (Mwita, 2025). These challenges highlight the centrality of financial configuration in aligning resources with mobility needs. Upon this background the study addressed the following research question: What is the association between strategic financial resource configuration and urban mobility outcomes in Nairobi City, Kenya? The following null hypothesis was tested:

H_{01}: Strategic financial resource configuration has no statistically significant association with urban mobility outcomes in Nairobi City, Kenya.

Literature Review

Theoretical Review

The study is anchored in the Resource-Based View (RBV), complemented by Resource Orchestration Theory (ROT). The RBV holds that organisations differ in performance because they control resources that are valuable, rare and imperfectly imitable, and that are supported by the organisation's systems for exploiting them (Barney, 1991). The theory was developed to explain competitive advantage among firms. Bryson et al. (2007), however, show that its logic carries over to public organisations once the criterion of performance shifts from advantage over rivals to the creation of public value for key stakeholders. Public transport agencies do not compete for market share, but they do differ in their capacity to convert finite resources into services that meet public needs.

Applied to public funds, the four RBV attributes take the following form. Financial resources are *valuable* when they can be directed to priority mobility investments and to the operation and maintenance of completed assets. They are *rare* in the sense that fiscal space, concessional loans and donor grants are scarce and contested across sectors. The systems that make them effective, such as multi-year financial plans, audit and monitoring arrangements and established relationships with financiers, are built over time and are specific to each institution, so they are *not easily imitated*. Finally, the *organisation* attribute refers to the budgeting, procurement and accountability systems through which funds are deployed. It is this last attribute that makes configuration, and not only possession, the focus of the present study.

Conceptual Framework

Figure 1 presents the conceptual framework. The independent variable, strategic financial resource configuration, comprises fund, grant and debt configuration. The dependent variable, urban mobility outcomes, comprises three dimensions:

- *Mobility safety*: the extent to which infrastructure, enforcement and technology protect road users, including vulnerable groups.
- *Mobility reliability*: the predictability and timeliness of travel and services.
- *Mobility efficiency*: the use of road space, technology and transport resources to reduce travel times and congestion.

These dimensions reflect the performance goals that Nairobi's transport agencies pursue and that financial resources are expected to support. Some outcome items concern technology, route design and real-time information. They are included because these system improvements depend on how investment funds are planned and allocated, although they are also shaped by non-financial factors. The framework links the two constructs through hypothesis H_{01}.

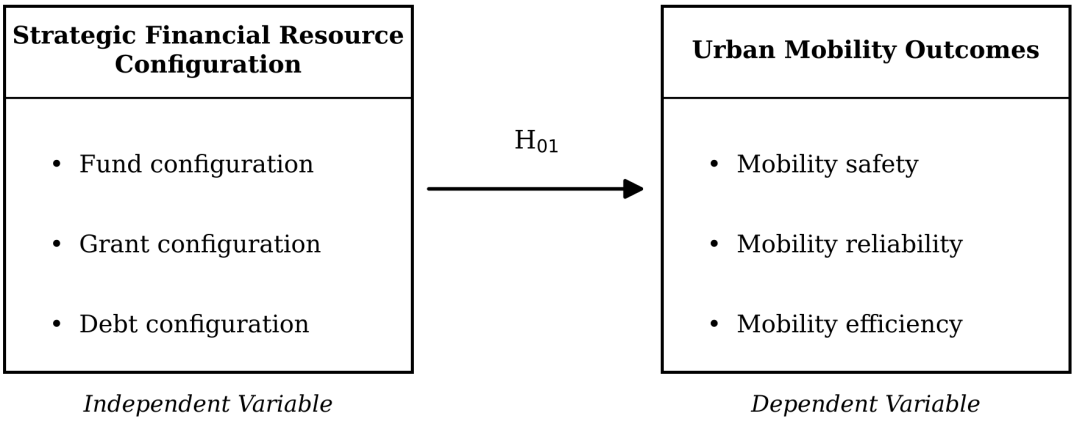


Figure 1: Conceptual Framework

Source. Authors (2026).

Empirical Review

Urban mobility today requires budget-friendly yet sustainable solutions. Governments are increasingly turning to non-motorised transit networks, integrated fare systems, and smart traffic technologies to reduce both capital outlay and recurrent costs (Zulueta et al., 2024). However, fund configuration is often undermined by competing social priorities and political interests. When financial allocations are misaligned, projects risk stalling, commuters face prolonged congestion, and trust in public institutions erodes. Conversely, when funds are strategically allocated, emphasising cost-effectiveness, lifecycle budgeting, and equitable distribution, transport agencies can deliver more resilient systems that meet commuter expectations.

Given the capital-intensive nature of transport projects in Kenya, debt financing remains a critical tool for bridging funding gaps. The government often uses borrowed funds to finance highways, rail networks, and bus rapid transit (BRT) systems (Gitau & Muendo, 2017). However, Volz (2022)

emphasises the need for strategic debt configuration which involves careful consideration of tenure, interest rates, exchange rate exposure, repayment terms, and debt sustainability analysis. Well-structured debt financing can accelerate infrastructure development, and blended finance and guarantees can mobilise private capital for infrastructure in developing economies (OECD, 2018). Weak debt management, by contrast, leads to over-indebtedness, constrained fiscal space, and repayment burdens that crowd out essential social spending.

The African continent's struggle with financial resource mobilisation has attracted critical attention, with scholars like Okunlola and Aregbeshola (2024) arguing that strategic optimisation of financial resources is crucial to ensure inclusiveness and development. Owusu et al. (2021), using Attention-Based View (ABV) Theory on 274 SMEs in Ghana, established that firms' financial resource-building efforts, through retained earnings, personal savings, supplier credit, and loans, determine availability. Although this is SME evidence, it is relevant to mobility projects, where governments' attention to diversifying financial sources affects their ability to sustain projects. Yet, these studies remain silent on the effectiveness of resource deployment once funds are mobilised. Thus, while strategies for raising funds are explored, less is known about how efficiently these funds are configured to achieve intended mobility outcomes such as safety, reliability and efficiency.

A recurring challenge across Sub-Saharan Africa is the misappropriation and mismanagement of funds. Corruption has been consistently cited as a barrier to transport project completion, delaying infrastructure delivery and inflating costs (Babatunde et al., 2019). Aradukunda and Sikubwabo (2024), examining Kigali's urban projects, found that financial planning exerted the strongest influence on project performance, followed by financial control mechanisms. Their findings suggest that beyond fund mobilisation, the governance of resources through planning, control, and monitoring is pivotal. However, these studies examine project performance in general rather than mobility outcomes. Most also rely on descriptive or cross-sectional designs, so they offer limited insight into how specific funding configurations interact with institutional dynamics to produce outcomes.

Empirical studies in Kenya further affirm the importance of fund configuration but also expose systemic inefficiencies. Njagi et al. (2018) reported that financial and physical resources significantly affect the performance of public health institutions in Embu County. Similarly, Wanyama et al. (2020), investigating Kenya's regional development authorities, confirmed that financial resources strongly influence performance, though governance structures moderate this relationship. Interestingly, accountability mechanisms showed weak moderating effects, raising concerns about the robustness of oversight in public entities. In Meru County, Kiambi and Njeri (2023) showed that project funding, competent managers and community participation jointly influenced the implementation of government-funded projects. These findings suggest that while financial resources are critical, weak institutional frameworks dilute their impact. The absence of sector-specific analysis for urban mobility highlights a contextual gap, as most Kenyan studies remain generalised to health, regional development or devolved institutions (Njagi et al., 2018; Ochola et al., 2022; Wanyama et al., 2020). Within the transport sector, Chibole and Mbataru (2023) found that financing significantly influenced completion of government road projects in Kenya. They emphasised that budgets directly affect all aspects of planning and implementation, and effective expense tracking across work packages determines project outcomes. Yet, while these findings reinforce the importance of funds, they stop short of critically examining how different financing structures, such as donor aid, domestic revenue, or public-private partnerships, differentially affect project timelines and quality.

Method

Research Philosophy and Design

The study adopted a positivist philosophy because it tested a hypothesis derived from theory using measured variables and statistical procedures (Saunders et al., 2019). A cross-sectional, descriptive correlational survey design was used (Creswell & Creswell, 2018). The descriptive component profiled respondents' assessments of financial resource configuration and urban mobility outcomes, and the correlational component estimated the direction and strength of the association between them. An experimental design was not feasible, because financial resources cannot be assigned to transport institutions by a researcher. The design therefore supports conclusions about association, not causation. Data were collected electronically through Google Forms over a two-week period in 2026, with follow-up reminders.

Population and Sampling

The target population comprised 765 individual organisational actors, identified from the human resource records of 25 institutions in Nairobi's urban mobility ecosystem. The institutions fell into three strata: public-sector agencies, private-sector organisations and international development partners (Table 1). The sample size was computed using Yamane's (1973) formula, $n = N / (1 + Ne^2)$, with $N = 765$ and $e = .05$, which gives $n = 263$. The sample was allocated to the three strata in proportion to their share of the population. Stratified allocation was used because the population could be divided in advance into known stakeholder categories using institutional records.

Table 1: Population and Sample Distribution by Stakeholder Stratum

Stratum	Institutions	Population (*N*)	Sample (*n*)
Public sector	Nairobi Metropolitan Area Transport Authority (NaMATA); Kenya Urban Roads Authority (KURA); Kenya Roads Board; Kenya National Highways Authority; Nairobi City County Government (Transport and Public Works); Public Procurement Regulatory Authority; National Transport and Safety Authority (NTSA); Public Private Partnership Directorate; Engineers Board of Kenya; Kenya Railways Corporation; National Environment Management Authority; National Construction Authority (12)	479 (62.6%)	165
Private sector	Matatu owners' associations; Critical Mass Nairobi (cycling movement); investment banks; Kenya Private Sector Alliance; Kenya Association of Building and Civil Engineering Contractors (5)	183 (23.9%)	63
International development partners	World Bank Group; Japan International Cooperation Agency; African Development Bank Group; European Investment Bank; German Development Bank; French Development Agency; Department for International Development Kenya; China Exim Bank (8)	103 (13.5%)	35
Total	**25 institutions**	**765 (100%)**	**263**

Instrument, Validity and Reliability

Data were collected using a structured questionnaire in two parts. The first part captured respondents' background characteristics, and the second contained the study scales. All scale items were rated on a five-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). Financial resource configuration was measured by four items on each of fund, grant and debt configuration, and urban mobility outcomes by four items on each of safety, reliability and efficiency.

Table 2 reproduces the wording of all items. Composite scores for each construct were computed in SPSS from the item responses.

Content validity was established through review by academics and practitioners in transport economics, urban planning and organisational management, and by an independent expert on urban mobility, whose comments were used to refine item wording. The instrument was piloted with 26 respondents (10% of the sample) from urban mobility-related organisations that were excluded from the main study, after which minor revisions were made to the clarity and sequencing of items. Pilot reliability, assessed with Cronbach's alpha, was $\alpha = .812$ for financial resource configuration and $\alpha = .665$ for urban mobility outcomes. The latter falls below the conventional threshold of .70 (Taber, 2018), which is treated as a limitation.

Data Analysis

Data were analysed using SPSS version 30. Frequencies and percentages described respondents' characteristics, and means and standard deviations summarised the items. Pearson's correlation coefficient measured the association between the composite scores. Ordinary least squares simple linear regression estimated the model $UMO = \beta_0 + \beta_1 FRC + \varepsilon$, where *UMO* is urban mobility outcomes, *FRC* is financial resource configuration and ε is the error term. The hypothesis was tested at the .05 significance level. The composite scores were treated as interval-level data, since parametric analysis of Likert-type composites is robust to departures from strict interval measurement (Norman, 2010). Before estimation, three assumptions were assessed graphically: linearity, with a scatterplot of the two composite scores; normality, with a histogram of the financial resource configuration scores; and homoscedasticity, with a plot of standardised residuals against standardised predicted values.

Ethical Considerations

The study received ethical clearance from the Institutional Scientific and Ethics Review Committee (ISERC) of the United States International University–Africa (approval no. USIU-A/ISERC/US1221-2025). A research licence was issued by the National Commission for Science, Technology and Innovation (NACOSTI; licence no. 348383), and an introductory letter was obtained from the School of Business. Participation was voluntary. A cover letter explained the purpose of the study and the nature of the questions, and informed consent was obtained before respondents proceeded to the questionnaire. Respondents could withdraw at any point without penalty. Identifiers were replaced with codes, and responses were reported only in aggregate. Data were stored on password-protected devices accessible only to the research team and were handled in line with Kenya's Data Protection Act, 2019.

Results

Descriptive Statistics

Response Rate and Respondent Profile

Of the 263 questionnaires administered, 220 were returned (83.7%). Of these, 214 usable responses (81.4% of the sample) were retained for the correlation and regression analyses. Among the 220 respondents who returned questionnaires, 61.8% were male and 38.2% female. The largest age group was 35–44 years (27.3%), followed by 25–34 years (23.6%), 45–54 years (19.5%), 18–24 years (17.8%) and 55 years and above (11.8%). Bachelor's degree holders formed the largest education group (36.4%), followed by holders of master's degrees (29.1%), diplomas (26.8%) and doctorates (7.7%).

By organisation type, 47.7% of respondents were from public-sector agencies, 25.5% from private-sector transport operators or companies, 24.5% from international development partners or NGOs, and 2.3% from financial institutions. This composition departs from the proportional allocation in

Table 1: international development partners are over-represented relative to their 13.5% share of the population. In terms of involvement, 43.7% were directly involved in implementing or operating urban mobility projects, 18.6% in planning and policy, and 16.8% in indirect roles such as research, consultancy or advice, while 20.9% reported no direct involvement in urban mobility activities.

Financial Resource Configuration

Table 2 summarises respondents' ratings of the financial resource configuration items. These are agreement ratings, so they reflect respondents' perceptions; they do not in themselves show that any practice affects mobility outcomes. All three dimensions had means above the scale midpoint: fund configuration (M = 3.85), debt configuration (M = 3.79) and grant configuration (M = 3.77).

Within fund configuration, the highest-rated items were transparent monitoring and evaluation of fund use (M = 3.94, SD = 1.31) and effective financial planning mechanisms (M = 3.91, SD = 1.28). They were followed by diversification of funding sources (M = 3.80, SD = 1.24) and adequate mobilisation of funds (M = 3.76, SD = 1.40); the latter had the largest standard deviation, indicating the least agreement among respondents. Within grant configuration, effective auditing systems in grant-funded projects received the highest rating (M = 3.88, SD = 1.25), followed by alignment of donor-funded grants with local priorities (M = 3.82, SD = 1.23), while the contribution of grant financing to accessibility received the lowest (M = 3.62, SD = 1.29). Within debt configuration, transparent management of debt-funded projects received the highest rating (M = 4.03, SD = 1.13), and the role of debt financing in bridging funding gaps the lowest (M = 3.54, SD = 1.26).

Three items were worded as problem statements: delays in grant disbursement (M = 3.78, SD = 1.21), high borrowing costs associated with infrastructure bonds (M = 3.67, SD = 1.24) and poor debt management practices (M = 3.90, SD = 1.28). Agreement with these items indicates that respondents recognise these constraints, not that the corresponding practices are sound.

Urban Mobility Outcomes

Perceptions of urban mobility outcomes were less favourable than those of financial configuration (Table 2). The mean for mobility safety (M = 3.03) was close to the neutral midpoint. Infrastructure adequacy for all road users received the lowest safety rating (M = 2.88, SD = 1.28), and the item on technology having improved safety the highest (M = 3.12, SD = 1.15). Both ratings are near neutral, so they do not indicate that technology or enforcement has improved safety.

Mobility reliability averaged M = 3.38. Public transport meeting commuters' time expectations received the lowest rating of all items (M = 2.74, SD = 1.38), while route design (M = 3.61, SD = 1.16) and real-time information systems (M = 3.51, SD = 1.21) were rated above the midpoint. Mobility efficiency had the highest outcome mean (M = 3.61). Within it, efficient use of transport resources (M = 3.79, SD = 1.18) and smart traffic management systems (M = 3.77, SD = 1.13) were rated highest, and shorter travel times lowest (M = 3.41, SD = 1.25).

Table 2: Descriptive Statistics for Financial Resource Configuration and Urban Mobility Outcome Items

Construct, dimension and item	*M*	*SD*
Financial resource configuration (pilot α = .812)		
Fund configuration	**3.85**	–
Adequate mobilisation of funds significantly improves the timely completion of urban mobility projects in Nairobi.	3.76	1.40
Effective financial planning mechanisms enhance the efficiency of fund utilisation in mobility infrastructure.	3.91	1.28
Diversification of funding sources strengthens the sustainability of mobility initiatives.	3.80	1.24
Transparent monitoring and evaluation of fund use directly improve reliability in urban transport projects.	3.94	1.31
Grant configuration	**3.77**	–
Grant financing has positively contributed to the accessibility of urban transport systems in Nairobi.	3.62	1.29
Delays in grant disbursement negatively affect efficiency delivery of transport infrastructure.	3.78	1.21
Effective auditing systems in grant-funded projects improve accountability.	3.88	1.25
Aligning donor-funded grants with local priorities enhances inclusiveness in mobility projects.	3.82	1.23
Debt configuration	**3.79**	–
Debt financing plays a crucial role in bridging funding gaps for large-scale urban mobility projects.	3.54	1.26
High borrowing costs associated with infrastructure bonds delay project completion.	3.67	1.24
Poor debt management practices negatively impact the sustainability of transport infrastructure investments.	3.90	1.28
Transparent management of debt-funded projects enhances public trust.	4.03	1.13
Urban mobility outcomes (pilot α = .665)		
Mobility safety	**3.03**	–
Existing transport infrastructure adequately enhances safety for all road users in Nairobi.	2.88	1.28
Safety audits and enforcement measures have reduced accidents in urban transport.	3.10	1.20
Integration of technology has improved safety in Nairobi's transport system.	3.12	1.15
Current safety measures address the needs of vulnerable groups such as pedestrians, children, and persons with disabilities.	3.01	1.39
Mobility reliability	**3.38**	–
Public transport services in Nairobi meet commuter time expectations.	2.74	1.38
Real-time information systems improve predictability of travel times.	3.51	1.21
Route design contributes to reliable urban mobility in Nairobi.	3.61	1.16
Reliable transport services encourage more people to use public transport instead of private vehicles.	3.66	1.25
Mobility efficiency	**3.61**	–
Transport system makes optimal use of available road space and infrastructure to reduce congestion.	3.49	1.19
Commuters experience shorter travel times due to efficiency improvements in public transport services.	3.41	1.25
Adoption of smart traffic management systems enhances efficiency.	3.77	1.13
Efficient use of transport resources improves service delivery.	3.79	1.18

Inferential Statistics

Regression Assumptions

The scatterplot of financial resource configuration against urban mobility outcomes showed a positive linear trend with no evident curvature. The histogram of financial resource configuration scores was approximately bell-shaped, with a slight deviation at the lower end. The plot of standardised residuals against standardised predicted values showed no funnel or other systematic pattern. The linearity and homoscedasticity assumptions were therefore considered satisfied, and no serious departure from normality was evident. Independence of observations could not be assumed, because respondents were nested within institutions. This was not modelled and is discussed under Limitations.

Correlation and Regression Analysis

Financial resource configuration was positively correlated with urban mobility outcomes, $r = .635$, $n = 214$, $p < .001$, 95% CI [.55, .71], a moderate-to-strong association (Table 3). Higher ratings of financial resource configuration were associated with more favourable ratings of mobility safety, reliability and efficiency.

In a simple linear regression estimated by ordinary least squares, financial resource configuration accounted for 40.4% of the variance in urban mobility outcomes ($R^2 = .404$, adjusted $R^2 = .401$), and the model was statistically significant, $F(1, 212) = 143.42$, $p < .001$. The remaining 59.6% of the variance is attributable to factors not included in the model. The unstandardised coefficient was $B = 0.352$ ($SE = 0.029$, $\beta = .635$), $t(212) = 11.98$, $p < .001$, 95% CI [0.295, 0.409]. In scale units, respondents whose financial resource configuration score was one point higher on the five-point scale rated urban mobility outcomes 0.35 points higher, on average. The estimated equation is:

$$\textit{Urban Mobility Outcomes} = 2.241 + 0.352 \times \textit{(Financial Resource Configuration)}$$

Because $p < .001$, the null hypothesis H_{01} was rejected. Strategic financial resource configuration has a statistically significant positive association with urban mobility outcomes in Nairobi City, Kenya.

Table 3: Correlation and Regression of Urban Mobility Outcomes on Financial Resource Configuration

Panel A. Correlation and model summary						
Pearson correlation	$r = .635$, $n = 214$, $p < .001$, 95% CI [.55, .71]					
Model summary	$R = .635$, $R^2 = .404$, adjusted $R^2 = .401$, SE of the estimate = 0.495					
Panel B. Analysis of variance						
Source	***SS***	***df***	***MS***	***F***	***p***	
Regression	35.103	1	35.103	143.42	< .001	
Residual	51.889	212	0.245			
Total	86.992	213				
Panel C. Regression coefficients						
Predictor	***B***	***SE***	***β***	***t***	***p***	**95% CI for *B***
(Constant)	2.241	0.098		22.90	< .001	[2.048, 2.434]
Financial resource configuration	0.352	0.029	.635	11.98	< .001	[0.295, 0.409]

Discussion

Financial resource configuration had a moderate-to-strong positive association with urban mobility outcomes in Nairobi City ($r = .635$, $B = 0.352$, $p < .001$) and accounted for 40.4% of their variance. The direction of this result is consistent with Aradukunda and Sikubwabo (2024), who found that financial planning and control were the strongest predictors of project performance in Kigali's public institutions. It is also consistent with Kiambi and Njeri (2023) and Chibole and Mbataru (2023), who

linked project funding and financing to the implementation and completion of government projects in Kenya.

These studies are only partly comparable with the present one. They measured project performance or completion rather than system-level mobility outcomes, used different instruments, and in most cases examined finance in general rather than configuration practices. The size of the present association should therefore not be compared directly with theirs.

The result is also in line with Wanyama et al. (2020) and Ochola et al. (2022), who identified financial resources as a determinant of performance in Kenyan regional development authorities and devolved governments. The comparison also points to a difference. Wanyama et al. (2020) found that accountability mechanisms had only weak moderating effects, whereas respondents in this study gave some of their highest ratings to transparency and monitoring items. The two findings need not conflict, because Wanyama et al. tested accountability as a moderator, whereas this study reports stakeholders' endorsement of accountability practices. Whether such practices strengthen the relationship between finance and performance in transport institutions remains an open question. In addition, because the predictor includes items on the adequacy of funds, the present study cannot show that configuration, as distinct from the amount of finance available, explains outcomes.

The findings concerning accountability and monitoring are also broadly consistent with Babatunde et al. (2019), who identified mismanagement and corruption as significant barriers to infrastructure delivery in Sub-Saharan Africa. Similarly, Widjaja and Sijabat (2025) emphasise the contribution of transparency to public spending quality. The high ratings given to monitoring and auditing items suggest that respondents see these mechanisms as important safeguards. The finding on diversified financing should be read as a perception only, since diversification was represented by a single item ($M = 3.80$) that was not analysed against outcomes. It is consistent with, but does not test, the argument of Owusu et al. (2021) that diversified financing strengthens resource availability, an argument based on SMEs rather than public agencies.

Several alternative explanations for the association should be considered, and the design cannot rule them out. One is reverse causality where Institutions with better-performing transport systems may find it easier to attract grants and to plan their finances. Second is the common-method variance, were the same respondents rated both constructs on agreement scales at the same time, so part of the association may reflect common-method variance (Podsakoff et al., 2003) or respondents' implicit belief that finance matters for mobility. Predictor items worded as statements of effect heighten this risk. Lastly, institutional capacity where broader institutional capacity, such as staffing, leadership or political support, may influence both financial practices and mobility outcomes.

From a theoretical perspective, the results are consistent with the Resource-Based View, which posits that internal resources, when strategically configured, create value and enhance performance (Barney, 1991), and with its extension to public organisations, where value is understood as public value (Bryson et al., 2007). The RBV attributes of value, rarity, inimitability and organisation were not measured, so the study does not test the theory; it shows an association that the theory would predict. The results are likewise consistent with Resource Orchestration Theory, which holds that managers' structuring, bundling and leveraging of resources shape performance (Sirmon et al., 2007, 2011): respondents who rated planning, budgeting and monitoring more favourably also rated mobility outcomes more favourably.

Conclusion

The study concludes that strategic financial resource configuration has a statistically significant, positive and moderate-to-strong association with urban mobility outcomes in Nairobi City, Kenya,

and the null hypothesis H_{01} was therefore rejected. Stakeholders who rated the planning, allocation, accountability and monitoring of funds, grants and debt more favourably also rated the safety, reliability and efficiency of the transport system more favourably. The composite accounted for 40.4% of the variance in perceived outcomes, so other factors also play a substantial part.

The study recommendations that NaMATA, KURA and the Transport and Public Works sector of the Nairobi City County Government should link their annual financial plans and budget-monitoring reports to explicit mobility performance indicators, such as travel-time, punctuality and crash rates. The National Treasury, the Controller of Budget and the development partners that finance mobility projects should publish project-level disbursement, expenditure and audit information for grant- and debt-funded transport projects at least annually. The Public Debt Management Office of the National Treasury and grant-implementing agencies should track grant disbursement timelines and the borrowing costs of transport projects within existing debt and project reporting.

Further research should triangulate perceptions with objective indicators, such as National Transport and Safety Authority crash statistics, travel-time and punctuality data for Bus Rapid Transit and matatu services, and Controller of Budget reports on budget implementation. Future studies should also estimate dimension-level and multilevel models that account for the nesting of respondents within institutions, and use longitudinal or panel designs that permit stronger causal inference.

The findings should be interpreted in light of a number of limitations. The cross-sectional, correlational design supports conclusions about association only, and reverse causality cannot be excluded. Both constructs were measured with self-reported perceptions from a single source at one point in time, which exposes the results to common-method bias (Podsakoff et al., 2003). No statistical test for common-method variance was conducted. The urban mobility outcome measure is perception-based rather than objective, and its pilot reliability ($\alpha = .665$) was below the conventional .70 threshold. Some outcome items, such as those on technology, route design and real-time information, are also influenced by factors other than finance. Several predictor items assert the effect being studied (for example, that adequate mobilisation of funds "significantly improves" project completion) and may therefore build the hypothesised relationship into the measurement. Three items were worded as problem statements, and some items address more than one idea. No factor analysis was conducted to confirm the dimensional structure of either scale. Respondents were nested within 25 institutions, but the analysis treated observations as independent. Clustering can make standard errors too small (Cameron & Miller, 2015), so the reported *p*-values and confidence intervals may overstate precision. Respondents within strata were selected purposively, and the achieved sample did not follow the proportional allocation. About one fifth of respondents reported no direct involvement in urban mobility activities, and non-response bias was not assessed. These features limit generalisation beyond the sampled institutions and beyond Nairobi. The model contains a single composite predictor and no covariates, such as institution type, respondent role or funding source. It does not separate the fund, grant and debt dimensions or distinguish configuration from the availability of funds.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author on reasonable request.

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