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**POLICY BROKERS AND THE WICKED PROBLEM OF TRAFFIC
CONGESTION IN NAIROBI CITY COUNTY KENYA**

Dr. Stanely Ontiri Motieri, PhD





Policy Brokers and The Wicked Problem of Traffic Congestion in Nairobi City County Kenya

Dr. Stanely Ontiri Motieri, PhD

*Department of Public Policy School of Law,
Arts and Social Sciences, Kenyatta
University*

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Abstract:

Purpose of the Study: The study investigated the influence of policy brokers on the wicked problem of traffic congestion in Nairobi City County, Kenya. Specifically, it examined how policy brokers facilitate coordination, knowledge co-production, stakeholder engagement, conflict resolution, and inter-institutional negotiations in addressing persistent and complex traffic congestion challenges within urban transport governance systems.

Methodology: The study adopted a pragmatism research paradigm and descriptive research design. Data were collected from 169 respondents selected using simple random and stratified sampling techniques from Nairobi City County transport departments and Usafiri Bora Coalition. Semi-structured questionnaires and interview schedules gathered primary

data, while descriptive and inferential statistics were applied in data analysis.

Findings: Policy brokers demonstrated a statistically significant strong positive correlation with addressing traffic congestion ($r=0.736$, $p<0.01$). Regression analysis confirmed brokers as influential predictors ($\beta=0.270$, $t=4.246$, $p<0.001$). Descriptive results showed strong agreement that brokers unite for knowledge co-production (mean=4.12), create deliberative venues (mean=4.18, highest), navigate competing agendas (mean=4.14), and attract county government attention through innovations (mean=4.17). Brokers coordinate policy formulation, frame congestion issues, and leverage opportunities for solutions. These findings affirm brokers' indispensable role in consensus-building and policy coordination within Nairobi's complex transport governance system.

Conclusion: The study concluded that policy brokers play a critical mediating and coordinative role in addressing traffic congestion in Nairobi City County. Through stakeholder engagement, negotiation, and knowledge-sharing processes, policy brokers enhance policy responsiveness and collaboration.

Keywords: *Policy Learning, Wicked Problems, Media Advocacy, Traffic Congestion, SACCOs, Matatu Welfare Association*

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1. INTRODUCTION

Background of the study

Wicked problems have been found to emerge out of one dimension or multiple dimensions (Head & Alford, 2015). This phenomenon is characterized by components that are interdependent and complex, hence breeding unintended consequences, uncertainty of risks, and nonlinear responses to the management of systems. Further, the involvement of multiple stakeholders often results in divergent decision-making values, while administrative and ecological processes experience mismatches in temporal and spatial scales. Similarly, sustainable development is considered a wicked problem due to insufficiencies witnessed in policy responses, governance coordination, and traditional decision-making approaches in ensuring its realization (Termeer et al., 2019).

Issues that appear unpredictable, open-ended, intractable, and complex are generally categorized as wicked problems (Alford & Head, 2017). The concept of wicked problems emerged from critiques directed at rational approaches toward complex issues whereby there was a tendency to overlook the lived experiences of citizens and stakeholders, their perspectives, and values, hence rendering interventions ineffective (Cairney, 2016). Interventions directed toward these complex policy programs appear difficult because attaining goal clarity, coordination, and sufficient levels of information is a major challenge. Therefore, exploring alternative approaches and understanding the nature of these issues requires prudent debate and deliberation for effective problem definition.

Health systems are equally characterized by wicked problems due to governance complexity and institutional constraints (Rittel & Webber, 1973). Likewise, climate and water governance systems demonstrate wickedness due to uncertainty and institutional fragmentation (Pahl-Wostl, 2015).

Traffic congestion is a wicked problem affecting major cities across the world. Rodrigue (2020) notes that urban congestion leads to significant productivity losses, fuel inefficiency, and environmental degradation. Similarly, Schrank et al. (2019) highlight that congestion costs economies billions of dollars annually through lost time and fuel consumption. In Dar es Salaam, traffic congestion significantly reduces productivity and working efficiency (Mpogole & Msangi, 2016). In Nairobi City, transport emissions are strongly associated with different vehicle categories including private cars and public service vehicles (Sitati et al., 2022).

Rodrigue (2020) further observes that complete eradication of traffic congestion in Nairobi is highly unlikely due to structural and planning limitations. Contributing factors include inadequate transport planning, weak traffic management systems, insufficient infrastructure, and rapid motorization. Therefore, traffic congestion requires coordinated governance involving multiple actors. It is from this perspective that the current study examines the influence of policy brokers on the wicked problem of traffic congestion in Nairobi City County, Kenya.

Policy brokers are crucial in the policymaking process because of their role in translating expert knowledge into governance practice, mediating conflicting interests, and linking previously disconnected policy actors (Weible et al., 2012). Policy brokerage is shaped by the complexity of public policy systems characterized by competing interests, actors, and agendas (Sabatier &



Weible, 2014). Policy brokers are actors connected across coalitions who possess relatively moderate belief systems and mediate between competing groups (Ingold & Varone, 2012).

Despite the usefulness of the Advocacy Coalition Framework (ACF) in explaining complex policy processes, little is known locally regarding its application to transport governance. Existing evidence shows that ACF has been widely applied in environmental, energy, public health, and education sectors (Jenkins-Smith et al., 2018; Sabatier & Weible, 2014). If applied in the transport sector in Nairobi City County, it may provide solutions to persistent traffic congestion challenges.

Statement of the Problem

The presence of traffic congestion is a testimony of public policy failure, while its absence is an indication of effective planning and implementation systems (Litman, 2020). Partially, what contributes to traffic congestion are simple and straightforward factors, hence making it a wicked problem. In both rural and urban areas, traffic congestion remains a social menace (Jain & Tiwari, 2017). Numerous attempts initiated to manage traffic congestion have failed to achieve the desired goals due to lack of prudent techniques and weak policy coordination.

Travel time and cost are reduced by efficient transport systems (Vuchic, 2017). The net effect of a better transport system is increased economic opportunities based on robust economic and behavioral decisions. Consequently, the menace of traffic congestion requires a policy panacea grounded in the Advocacy Coalition Framework, which has successfully informed policies in environmental, education, energy, and climate change sectors.

According to Faling and Biesbroek (2019), policy entrepreneurs require resources such as time, funding, and strategic networks in establishing cross-boundary linkages aimed at targeting institutions, interests, and varying ideas across policy boundaries. Cross-boundary entrepreneurial strategies employed to influence climate-smart agriculture in Kenya include venue shopping, multiple framing of issues, brokerage between coalitions, and process manipulation within complex policymaking environments. Existing studies demonstrate a dearth of evidence regarding policy brokers and wicked policy problems. Most empirical evidence presents alternative approaches to policy solutions, but little is known regarding the extent to which policy brokers influence the wicked problem of traffic congestion in Nairobi City County. It is from this backdrop that the current study seeks to fill this crucial gap by investigating the influence of policy brokers on the wicked problem of traffic congestion in Nairobi City County, Kenya.

Specific Objectives: To examine the influence of policy brokers on the wicked problem of traffic congestion in Nairobi City County Kenya.

2. LITERATURE REVIEW

Policy Brokers and Wicked Problem

Chu et al. (2022) examined the roles played by policy brokers and policy learning within advocacy coalitions in rural revitalization. Narrative analysis and the Advocacy Coalition Framework were used to demonstrate how revitalization efforts were hindered by misconceptions. Findings



indicated that policy misconceptions were addressed through strategies employed by policy brokers, including knowledge co-production, issue reframing, venue creation, and issue framing, which facilitated policy learning and change in policy beliefs. However, the study was conducted in Hong Kong whereas the current study focuses on Nairobi City County.

Rodrigues et al. (2020) investigated advocacy coalition formation and key actors within policy processes. The study found that policy brokers were essential in maintaining social inclusion in agenda setting although they did not achieve a positive relationship in coalition building. Further, policy-oriented learning and beliefs were shared through mechanisms established by policy entrepreneurs, thereby strengthening advocacy coalition formation. The study had a broader scope involving both policy brokers and policy entrepreneurs, while the current study specifically focuses on policy brokers.

Norton et al. (2016) investigated the role of knowledge brokers in translating knowledge into action following global maternal and newborn health technical meetings in South Africa and Bangladesh. The exploratory study incorporated both quantitative and qualitative approaches involving 847 participants through online surveys and interviews. Findings revealed that scientific and country-specific information was utilized to improve service delivery and influence policy change. However, the study focused on maternal health whereas the current study addresses traffic congestion.

Irwin (2018) explored the challenges experienced by the Tanzania Horticultural Association in influencing public policy. Findings suggested that although the association encountered difficulties in changing policy imperatives, it managed through careful framing to place issues on the policy agenda, influence policy implementation, provide solutions to coordination challenges, and support both government and farmers. However, the study was conducted within the horticultural sector while the current study focuses on the transport sector.

Kingiri and Hall (2012) examined the role of policy brokers within the biotechnology industry in Kenya. Findings revealed that biotechnology policy was informed by varying challenges and opportunities identified through policy brokers and innovation insights. However, the study focused on biotechnology regulation in the agricultural sector while the current study focuses on transport policies related to traffic congestion.

Njoroge et al. (2017) explored climate change policymaking processes in Kenya with a focus on deliberative inclusionary processes. Semi-structured interviews were utilized to collect data from sampled respondents. Findings suggested that Kenyan policymaking processes were characterized by deliberative inclusionary approaches where policy outcomes were shaped by narratives, discourses, institutions, networks, interests, actors, and politics. However, the study focused on climate change policymaking processes, and therefore its findings cannot be generalized to the current study.

Group Theory

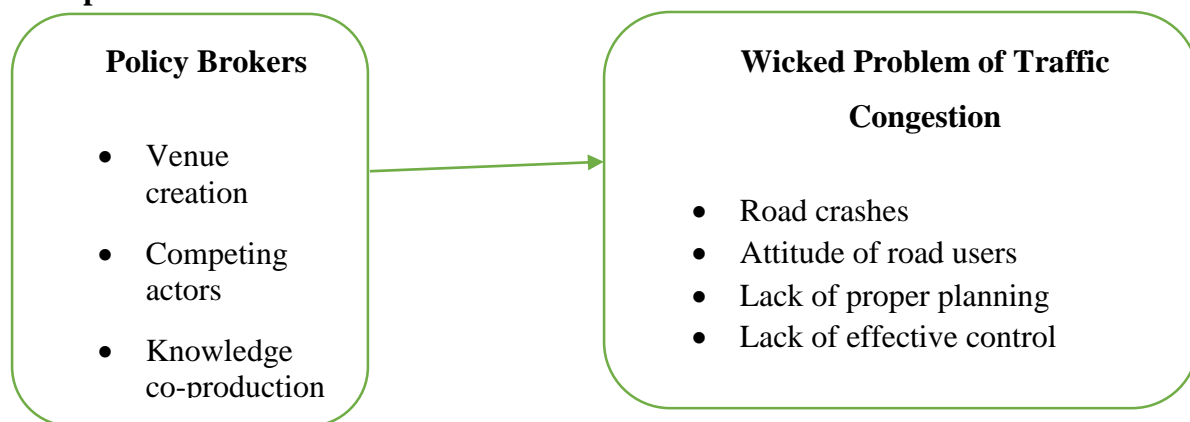
Arthur Bentley pioneered Group Theory. The theory argues that the struggle inherent in groups and public policy are inseparable and that the equilibrium reached through such struggles translates into public policy (Bentley, 1908). Public policies are manifestations of group activities whereby



different groups attempt to influence policies to their advantage during policy formulation processes. Anyebe (2018) reiterates that group struggles give birth to public policy. During competition, temporary compromises exhibited by groups of cross-cutting membership constitute public policy. Pressure exerted through negotiation, bargaining, compromise, and maintenance of equilibrium within the system compels policymakers to accommodate dominant group interests.

Group Theory is relevant to the current study because it explains group dynamics manifested through coalition resources, media advocacy, policy learning, and policy brokering aimed at influencing policy change in favorable directions. The theory further provides insights into how bureaucratic structures ensure societal well-being through engagement with groups in finding solutions to wicked problems such as traffic congestion.

Conceptual Frameworks



3. RESEARCH METHODOLOGY

The study adopted pragmatism research philosophy because it advocates for the adoption of mixed methods, whether qualitative or quantitative, and provides an essential approach for understanding social research (Morgan, 2014). The study further adopted descriptive research design due to its suitability in describing phenomena without manipulating study subjects (Siedlecki, 2020). Therefore, the phenomenon of policy brokers and the wicked problem of traffic congestion was described using descriptive research design. Simple random sampling, purposive sampling, and stratified sampling techniques were employed to select a representative sample of 169 respondents drawn from SACCOs operating along different city routes, senior officials from the Matatu Welfare Association, National Transport and Safety Authority, Ministry of Transport, Usafiri Bora Limited, Mazingira Mema Group, and Smart City Movement Group. Primary data were collected using questionnaires and in-depth interview schedules.

4. FINDING AND DISCUSSION

Demographics



The study targeted 168 respondents sampled from various stakeholders within the Nairobi transport sector. Out of the 168 questionnaires administered, 137 were duly completed and returned, translating to a response rate of 81.5%. According to Fincham (2008), a response rate above 70% is considered adequate for social science research because it enhances the reliability and generalizability of findings. The majority of the respondents were male at 65.0%, while female respondents accounted for 35.0%. A larger portion of respondents fell within the 36–45 years’ age bracket at 35.8%, followed by those aged between 46–55 years at 27.7%. Respondents aged below 35 years constituted 20.4%, while those aged 56–65 years and above 66 years accounted for 11.7% and 4.4%, respectively.

In terms of education levels, the majority of the respondents held graduate-level qualifications at 49.6%. Those with Higher Diploma qualifications constituted 34.3%, while certificate holders were the least represented at 16.1%. The study established that the majority of respondents had between 7–10 years of experience in the transport sector, constituting 38.0%. Those with over 11 years of experience followed at 23.4%, while respondents with 4–6 years of experience accounted for 27.7%. The least represented group comprised respondents with less than 3 years of experience at 10.9%. It was further revealed that the majority of respondents had been involved in traffic congestion solution initiatives between 7–10 times, representing 37.2% of the sampled population. This was followed by those who had participated 4–6 times at 30.7%. Respondents who had been involved over 11 times constituted 19.0%, while those who had participated less than 3 times were the fewest at 13.1%.

Descriptive Statistics

Influence of policy brokers on the Wicked Problem of Traffic Congestion in Nairobi City County, Kenya

The study sought to investigate the influence of policy brokers on the wicked problem of traffic congestion in Nairobi City County, Kenya. Respondents were presented with statements on a five-point Likert scale to gauge their level of agreement.

Table 1. Influence of Policy Brokers on Traffic Congestion

Statement	SD f(%)	D f(%)	N f(%)	A f(%)	SA f(%)	Mean	Std
Brokers in the transport industry unite to co-produce knowledge on addressing traffic congestion.	3.6	5.8	8.8	37.9	43.8	4.12	0.90
The process of finding solutions to congestion encounters competing agenda, actors and interests.	2.9	5.1	9.5	40.1	42.3	4.14	0.86
Improved traffic flow in the city results from social inclusion in the agenda setting process.	3.6	6.6	8.8	36.5	44.5	4.12	0.92



Venues created for swaying policy direction matter a lot in the transport sector.	2.9	4.4	8.8	39.4	44.5	4.18	0.85
Appropriate varying challenges determine the degree to which policy brokers influence transport policies.	3.6	5.8	10.2	37.2	43.1	4.10	0.91
Policy formulation activities are more often coordinated by the policy brokers.	4.4	6.6	9.5	35.8	43.8	4.08	0.97
The county government is attracted by innovations showcased by policy brokers on traffic congestion.	2.9	5.1	8.8	38.7	44.5	4.17	0.87
Appropriate varying opportunities have made it easy for policy actors to offer solutions.	3.6	5.8	8.0	38.7	43.8	4.13	0.89
Traffic congestion issues are always framed and reframed effectively by the county government.	3.6	6.6	10.2	37.2	42.3	4.08	0.93

Source: Field Data (2024)

The findings revealed that the majority of respondents strongly agreed that brokers in the transport industry unite to co-produce knowledge on addressing traffic congestion (SA = 43.8%, A = 37.9%), as supported by a mean score of 4.12 and a standard deviation of 0.90. This finding highlights the collaborative epistemic function of policy brokers in synthesizing diverse stakeholder knowledge into actionable transport governance frameworks. These findings are consistent with Head and Alford (2015), who observed that wicked policy problems require collaborative knowledge generation among multiple actors to formulate sustainable solutions.

The study also revealed that the majority strongly agreed that the process of finding congestion solutions encounters competing agendas, actors, and interests (SA = 42.3%, A = 40.1%), supported by a mean of 4.14 and a standard deviation of 0.86. These competing dynamics reflect the classic characteristics of wicked problems where no single actor possesses sufficient authority or capacity to impose unilateral solutions. This finding concurs with Rittel and Webber (1973), who argued that wicked problems are characterized by conflicting values, competing interests, and institutional complexity.

Furthermore, the study revealed that the majority of respondents strongly agreed that improved traffic flow in the city results from social inclusion in the agenda-setting process (SA = 44.5%, A = 36.5%), with a mean of 4.12 and a standard deviation of 0.92. Inclusive agenda-setting processes that incorporate marginalized transport users, including pedestrians and informal traders, tend to generate more contextually relevant policy outcomes. This finding supports the work of Fung (2015), who emphasized that participatory governance mechanisms enhance legitimacy and policy effectiveness in urban governance systems.



The study revealed that most respondents strongly agreed that venues created for swaying policy direction are of great importance in the transport sector (SA = 44.5%, A = 39.4%), supported by a mean of 4.18 and a standard deviation of 0.85, which was the highest mean recorded in this section. Deliberative venues such as transport sector forums and inter-agency technical committees are pivotal platforms for coalition negotiation and policy mediation. This finding aligns with Sabatier and Weible (2014), who established that policy-oriented learning and negotiation within coalitions are critical for policy change in complex governance systems.

The study further revealed that the majority agreed that appropriate varying challenges determine the degree to which policy brokers influence transport policies (SA = 43.1%, A = 37.2%), supported by a mean of 4.10 and a standard deviation of 0.91. The contextual variability of policy challenges necessitates adaptive brokerage strategies that respond to shifting institutional and environmental conditions. This observation is supported by Faling and Biesbroek (2019), who established that policy brokers rely on adaptive cross-boundary strategies to navigate dynamic policy environments.

Moreover, the study revealed that the majority of respondents strongly agreed that policy formulation activities are more often coordinated by policy brokers (SA = 43.8%, A = 35.8%), supported by a mean of 4.08 and a standard deviation of 0.97. One interviewee from the Smart City Movement Group remarked that “without dedicated policy brokers who bridge the gap between technical experts and political decision-makers, many transport reform proposals would never make it to the legislative agenda.” This finding is congruent with Chu et al. (2022), who found that policy brokers play a central coordinative and legitimation function in multi-stakeholder governance contexts.

The study further revealed that the county government is attracted by innovations showcased by policy brokers on traffic congestion solutions (SA = 44.5%, A = 38.7%), supported by a mean of 4.17 and a standard deviation of 0.87. Innovative policy proposals promoted by brokers serve as catalysts for institutional interest and uptake of evidence-based transport interventions. This finding is consistent with Kingiri and Hall (2012), who established that innovation insights promoted by policy brokers significantly shape policy adoption and implementation processes.

Additionally, the study revealed that appropriate varying opportunities have made it easy for policy actors to offer solutions to congestion challenges (SA = 43.8%, A = 38.7%), supported by a mean of 4.13 and a standard deviation of 0.89. The alignment of opportunity structures with broker capabilities is critical in advancing viable and politically feasible transport policy solutions. This finding resonates with Mintrom and Norman (2009), who argued that policy entrepreneurs and brokers capitalize on windows of opportunity to advance policy change.

Lastly, the study revealed that the majority of respondents strongly agreed that traffic congestion issues are always framed and reframed effectively by the county government (SA = 42.3%, A = 37.2%), supported by a mean of 4.08 and a standard deviation of 0.93. The framing and reframing of congestion as both a technical and social governance challenge enables iterative policy refinement. This finding aligns with Schön and Rein (1994), who established that issue framing and reframing are central mechanisms in resolving policy controversies and governance dilemmas.



Correlation Analysis

Pearson correlation analysis was performed to establish the nature and strength of the bivariate relationships between the independent variable (Policy brokers) and the dependent variable (wicked problem of traffic congestion).

Table 2. Pearson Correlation Matrix

Variable	Traffic Congestion	Sig. (2-tailed)	N
Policy Learning	0.721**	0.000	137

Correlation is significant at the 0.01 level (2-tailed).

Source: Field Data (2025)

Policy brokers had a statistically significant and strong positive correlation ($r = 0.736, p < 0.01$) with the wicked problem of traffic congestion at the 0.01 significance level. These findings suggest that policy brokers are a crucial predictor of the traffic congestion outcome variable, thereby justifying the subsequent regression analysis. This finding supports the assertions of Ingold and Varone (2012), who argued that policy brokers significantly influence policy coordination and consensus-building within complex governance systems.

Table 3. Regression Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	0.412	0.218		1.890	0.061
Policy Brokers (X3)	0.276	0.065	0.270	4.246	0.000

Dependent Variable: Wicked Problem of Traffic Congestion.

Source: Field Data (2026)

Policy brokers had a statistically significant positive relationship with the wicked problem of traffic congestion. Policy brokers recorded a high standardized beta coefficient ($\beta = 0.270, t = 4.246, p < 0.001$), implying that they are influential predictors of outcomes related to the wicked problem of traffic congestion. These findings collectively affirm the significant role of policy brokers in addressing the wicked problem of traffic congestion in Nairobi City County. The findings are in line with Kingiri and Hall (2012), who established that policy processes are significantly shaped by varying challenges, opportunities, and innovation insights facilitated through policy brokers.

5. CONCLUSION AND RECOMMENDATIONS

The study concluded that policy brokers play an indispensable mediating and coordinative role in the multi-stakeholder processes directed at addressing the wicked problem of traffic congestion in Nairobi City County. The ability of brokers to create deliberative venues, co-produce knowledge, coordinate policy formulation activities, and navigate competing interests positions them as critical architects of coalition consensus. The study concluded that cultivating a robust community of



skilled policy brokers within the transport sector individuals and institutions capable of bridging technical expertise, community interests and political authority is a strategic imperative for Nairobi City County's traffic governance reform agenda. Without effective brokerage, the competing agenda of transport stakeholders risk degenerating into policy gridlock, leaving the wicked problem unresolved.

The study recommended that stakeholder organizations within the transport sector should invest in identifying, training and supporting a cadre of professional policy brokers equipped with skills in conflict resolution, knowledge co-production, issue framing and inter-institutional negotiation. These brokers should be formally integrated into the transport policy formulation process through appointment to advisory committees, technical working groups, and inter-agency consultative bodies. Relevant professional bodies and universities should develop accredited training programs in transport policy brokerage, thereby building sustainable institutional capacity to manage the complex multi-actor dynamics inherent in urban traffic governance.

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