



DUCS 2.0: exploring new frontiers in research

Research and Innovation Division,
Universiti Teknologi MARA (UiTM) Selangor,
Puncak Alam Campus

THE ROLE OF LOCAL AUTHORITIES IN MALAYSIA TOWARD SAFE CITIES INITIATIVE

Raja Norashekin Binti Raja Othman^{1*}, Farrah Norizzah Yussof², Hamimah Binti Adnan³, Rostam Bin Yaman⁴, Marlyana Azyyati Binti Marzukhi⁵

^{1,5} School of Town & Regional Planning, College of Built Environment, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

^{2,3} School of Construction Management, College of Built Environment, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

⁴ School of Interior Architecture, College of Built Environment, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia

*Corresponding author e-mail: Rnora747@uitm.edu.my

ABSTRACT

Local authorities in Malaysia are facing mounting challenges in managing and maintaining urban areas. City life is complex due to the interactions of people in crowded areas. The performance of local authorities greatly influences the public's impression of the entire governance system, and safe delivery is a key metric for gauging a developed nation's success. The role of local authorities in the Safe Cities initiative is crucial for ensuring the safety and well-being of residents. Local authorities play a significant role in implementing, managing, and overseeing various aspects of creating a safe and secure urban environment. Various strategies and signs have been implemented to ensure safety. It is crucial to understand the role of LAs and how they represent safety initiatives, as reflected in the Safe Cities index. Therefore, in this study, three (3) local authorities (LAs) at central zone were chosen as the case study and stated as CS1, CS2 and CS3. A qualitative methodology using semi-structured interviews was conducted to achieve both objectives. The aim of this paper is to have an overall view of safe city implementation conducted and to what extent the core business of each LA aligned with the five (5) key domains of safe city: personal (physical), infrastructure, digital, health and environment security. Besides, it identifies which domain captures the most dominant among the departments within the local authority level. Besides, it identifies which domain captures the most dominant among the departments within the local authority level. This study reveals that only about half of the departments in the case studies were aligned with the task of creating safe city initiatives. It was implemented in 11 out of 22 departments to address objective one. The local authority council commonly utilises the domain of digital security among its various departments to address the second objective. The research findings provide crucial new information for establishing appropriate benchmarks for safe cities to be delivered at all council levels. The findings from this study hold significant importance, serving as a guiding light for other local authorities (LAs) seeking suitable benchmarks in their pursuit of a safer city paradigm. It's evident that the approach adopted by these authorities extends beyond crime prevention within the physical realm, encompassing multiple facets across safe city domains. This collective effort underscores the progress of LAs in Malaysia's central zone, demonstrating advancement not solely within specific departments but across the board. The forthcoming study explores diverse initiatives and strategies that promise to curtail operational costs while enhancing community life quality—a pivotal exploration. Ultimately, this approach can be extrapolated to municipalities and districts nationwide by tailoring adjustments to suit specific local contexts, fostering widespread implementation and positive impact throughout Malaysia.

Keyword: Local Authorities, Safe City, City Council.

INTRODUCTION

It is estimated that the population of Malaysia will increase to 41.5 million by 2040, from 28.6 million in 2010 [1]. Additionally, a further increase of 40 million is expected by 2050. Urbanization is an ongoing process in Malaysia, which means that urban living and urbanism are crucial aspects of Malaysian society [2].

Densely populated cities no longer provide adequate protection for the well-being of urban society, as people flock there in search of employment to meet their diverse needs. This has resulted in inadequate amenities, leading to flooding and poor living arrangements in certain areas, which have generated a range of social problems, including crime. Typically, crime is the primary indicator of safety

performance. Nevertheless, even though the majority of studies exclusively discuss safe cities in connection to crime reduction [6][7][8], casualties from other problems like inadequate traffic management and vehicle accidents should also need to be taken into account to reflect safety [5]. While creating a safe community inside a city may entail multiple layers of stakeholders, the primary objective of public management in urban areas has been emphasised as providing a range of solutions related to safety and enhancing the quality of urban places [9]. Nonetheless, interested and impacted parties raised the matter of LAs' performance [10]. Thus, it is essential to comprehend the responsibilities and obligations of LAs.

Therefore, the study examined the function of local administrations (LAs) in the organisational structure of the city council by comparing workstreams within the council to better understand their contributions to the successful implementation of the safe city strategy. The study was conducted using a straightforward mapping exercise that involved the duties and responsibilities of the chosen city councils toward the five (5) safe city index domains: physical, infrastructure, health, digital, and environment security. This conceptual study was then developed as a result of the mapping. All levels of city councils are expected to gravitate towards the Safe City strategy.

The Fundamentals of Safe City.

A safe city indicates different perspectives among people. A safe city has no widely agreed-upon definition. As such, the idea of a safe city differs from nation to nation and city to city. A widely recognised definition of a safe and secure city is one that is livable, sustainable, inclusive, tolerant, and technologically advanced [11]. Governments, mayors, and legislators face their greatest task in ensuring the safety and security of their citizens. A dependable option, Safe City offers a range of integrated operational services for an incredibly intricate operational chain and efficient deployment, both at the local level within a municipality and via integration into a unified federal framework [12].

Safe City Index

Four (4) primary domains of the Safe City Index are digital, infrastructural, health, and personal. Environmental security was added to the Safe City Index in 2021 as the fifth major domain [16]. Because of this modification, the index now goes beyond the conventional urban safety box and aligns with the shifts in perception brought about by COVID-19. For the 2021 Safe City Index, more than 51 indicators were gathered, as mentioned in Table 1

Table 1: Safe City Index

Digital Security	Infrastructure Security	Health Security	Personal Security	Environmental Security
Privacy policy Citizen awareness of digital threats Secure smart cities Cybersecurity preparedness Public-private partnerships Percentage with internet access Secure internet servers Risk of attacks IT infrastructure risk Percentage of computers infected from online attacks.	Enforcement of transport safety Pedestrian friendliness Disaster management/business continuity plan Water infrastructure Hazard monitoring Road traffic deaths Deaths from climate-related disasters Transport infrastructure: Air transport facilities Transport infrastructure: Road network Transport infrastructure: Rail network Power network Institutional capacity and access to resources Catastrophe insurance Disaster-risk informed development Percentage living in slums Percentage of homeless population	Universal healthcare coverage Availability of public healthcare Availability of private healthcare Availability of OTC drugs Quality of private healthcare provision Quality of public healthcare provision No. of beds per 1,000 No. of doctors per 1,000 Access to safe and quality food Policy on substance abuse /drug use Pandemic preparedness Mental health Emergency services in the city Life expectancy years Infant mortality	Use of data-driven techniques for crime Gun regulation and enforcement Threat of terrorism Threat of military conflict Threat of civil unrest Police personnel per capita Prosecution personnel per capita Professional judges or Magistrate personnel per capita Expenditure on social security Laws on domestic violence Laws on sexual harassment	Sustainability masterplan Incentives for renewable energy Green economy initiatives Waste management Sustainable energy Rate of water stress Air quality levels Urban forest cover Waste generation

Source: Hino et al. (2021).

Local Governments in Malaysia

According to Malaysia's Constitution, state governments have exclusive jurisdiction over local governments, except those in federal territory. They have the power to oversee, organise, and carry out delegated tasks in a limited region [17]. All societal facilities that are being charted under Act 171 Sections 5(1) (Malaysia, 1976a) and 6(1) of the Town and Country Planning Act 1976, Act 172 [18] (Laws of Malaysia, 2006), which grants authority for development control [19], and Sections 101 and 102 of the Local Government Act 1976 serve this purpose. The term "local authorities" (Pihak Berkuasa

Tempatan, or PBT) is typically used to refer to local governments divided into city, municipal, and district councils. Table 2 shows that there are currently 152 Local Authorities in Malaysia.

Table 2: Local Authorities in Malaysia

Types of Local Governments in Malaysia	Numbers
Cities	19
Municipalities	40
Districts	92
Special Local Councils	1
Total	152

Source: Adopted from Local Government Department, Ministry of Housing and Local Governments (2022)

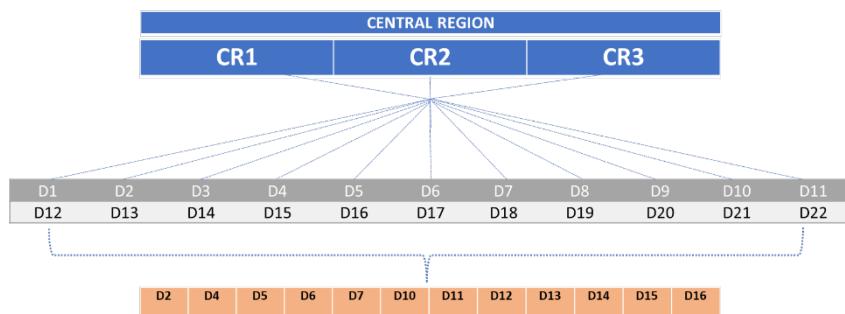
MATERIAL AND METHOD

The first step is to review the local authorities' understanding of their roles and tasks in the organisation's workstream. Three (3) local authorities, namely CS1, CS2, and CS3, were selected due to their location, population, and economic condition, and they were among the prominent LA contributors to safe city initiatives.

The second stage involved a simple mapping exercise to explore how LAs are working to fulfil the safe city index based on the first finding. It is a descriptive exploratory study using primary and secondary data. Interview sessions were conducted with officers in the organization working in related fields. Three respondents were selected in this study. The study aims to indicate the specific area within the local authority management contribution regarding the safe city approach.

Table 3: Representative Respondents of City Council and Administrative Unit

Case Study	Respondent	Scope Of Task	Working Duration with LAs
CR1	R1	Deputy Director of Town Planning Officer Sustainable Development	More than 18 years
CR2	R2	Senior Officer of Town Planning Sustainable Development	More than 10 years
CR3	R3	Deputy Director of Town Planning Officer Sustainable Development	More than 20 years



Note:

CR = Local Authority – City Council

D1 – D22 = Management Unit in City Council

RESULTS AND DISCUSSION

This section analyzes the multifaceted aspects of creating and sustaining safe cities. It delves into the complex interplay between various workstreams that collectively contribute to the overall safety framework within urban environments.

This study involved representatives from three city councils in the central zone of Selangor, who were selected to represent the other 19 city councils across Malaysia's 14 states. Within CS1, CS2, and CS3, there are 22 departments. The study utilised a socio-legal approach involving library-based research and interviews with senior officers from the three local authorities (LAs).

According to this study, only 12 departments have aligned more than 50% with the various safe city domains. These departments are D2, D4, D5, D6, D7, D10, D11, D12, D13, D14, and D15, as presented in table 4. It also indicates that most of the departments in the local authority did not address any of the safe city domains, such as Digital, Infrastructural, Health, Personal, and Environmental Security. Nevertheless, the remaining departments, including D1, D3, D8, D9, D16, D17, and D22, have still been contributing to the community, but to a lesser extent than the first 12 departments, as they have addressed their tasks toward safe city indicators minimally.

The Safe City initiatives carried out by 11 departments (D2, D3, D5, D6, D7, D9, D10, D11, and D12) reflect significant progress towards the five domains listed in the Safe City Index, which contribute 40% towards a safer city. While most departments focus on a specific domain, it is noteworthy that some departments, such as D5, D10, and D11, work simultaneously on multiple domains. The organisation seems to have made significant strides towards digitisation, which could result from the COVID-19 pandemic that forced changes to maintain productivity.

Table 4: City Council's Work Scope and Departmental Unit

Code	Department /Unit	Scope of Work	Representative Officer			Safe City Indicators	Domain
			CS1	CS2	C S3		
D2	Corporate Department and Strategic Management Unit/ Sector of Corporate and Strategic Management	Responding and responding to issues arising in the mass media.	/	/	/	Secure Smart Cities	Digital Security
		Preparation and coordination of information on the mass media	/	/	/		
		Coordinating the flow of public complaints process and call centre management	/	/	/		
		Carry out monitoring at the location of complaints periodically.	/	/	/		
D4	Department of Information Technology Unit	Planning, developing and implementing the use of ICT	/	/	/	Privacy policy Citizen awareness of digital threats	Digital Security
		Providing the latest ICT facilities to employees and to the citizens of LA.	/	/	/		
		Provide exposure and culturalization of ICT	/	/	/		
D5	Department of Development Planning	Planning development within the area of LA toward sustainable development	/	/	/	Sustainability masterplan	Physical Security
		Prepare and monitor Structural Plans and Local Plans Check the policies provided to be improved and updated occasionally.	/	/	/	Use of data-driven techniques for crime	Environment Security
		Process the application for permission to plan the layout/standing of the building.	/	/	/	Sustainability masterplan	Infrastructure Security
		Coordination and enforcement of authorized and unauthorised properties	/	/	/		
		Coordinate planning standards and guidelines.	/	/	/		
		Supporting applications to charge land conditions, lot mergers, and government land applications	/	/	/		
		Support license application, development plans	/	/	/		
		Monitor the development of low-cost houses.	/	/	/		

		Geography Information System (GIS)	/	/		Secure smart cities Hazard monitoring.	Infrastructure Security
D6	Engineering Department	Responsible for reviewing, approving and infrastructure plans for the new and existing development areas	/	/	/	Enforcement of transport safety	Infrastructure Security
		Process and issue earthwork permits	/	/	/	Pedestrian friendliness	
		plan, manage coordinate and maintain infrastructure facilities drain, flood repair works and projects	/	/	/	Disaster management	
		Monitor, supervise and maintain slopes from landslides	/	/	/		

D7	Department of Health and Environmental Services	Controlling and monitoring business premises, industry, workshops, kindergartens, nurseries, dogs	/	/	/	Quality of public healthcare provision	Health Security
		Enforcement, monitoring and inspection on food premises and public building	/	/	/	Access to safe and quality food	
		Disease control using dengue fever control, abandoned (land and house) and cemetery management	/	/	/	Quality of public healthcare provision	
		Nuisance animal control	/	/	/		
D10	Building Control Department	Processing and approving plans for additional new buildings and amendments to existing buildings	/	/	/	Percentage with internet access	Digital Security
		CCC application	/	/	/		
		Designing and supervising special projects of the Council such as stalls, halls, 'food-court' and others	/	/	/	Use of data-driven techniques for crime	Physical Security
		Process and approve equivalent permits for construction/temporary buildings permits	/	/	/	Sustainability masterplan	Environment Security
		Monitor, inspect and enforce the law among illegal construction projects	/	/	/		
D11	Society/Community Development Department	Ensure programs and activities organized by the Department are implemented efficiently and effectively	/	/	/	Community based patrolling	Environment Security
		Ensure the 24 zones and Resident Representative Council implements the program planned	/	/	/	Level of police engagement	Physical Security
		Providing library services to the community to cultivate a knowledgeable society	/	/	/	Community based patrolling	Environment Security
		Organize sports and youth programs for the community in the LA territory to inculcate spirit of racial	/	/	/		
D12	Department of Enforcement	Implement the enforcement of laws and regulations	/	/	/	Sustainability masterplan	Environment Security
		Operation of a 24-hour to receive, monitor and provide preliminary enforcement services for emergencies	/	/	/	Secure smart cities	Digital Security
		Providing and providing rescue assistance services in the event of disasters and floods	/	/	/	Hazard monitoring	Infrastructure Security
		Controlling and taking care of the property of the Council	/	/	/	Level of police engagement	
		Integrated enforcement in technical actions (Task Force)	/	/	/		

		Enforcement of wrong parking which gazetted as Towing Zones	/	/	/		
D13	Landscape Department	Landscape project planning and management	/	/	/	Sustainability masterplan	Physical Security
		Park maintenance and landscape maintenance programs on a contractual and 'in-house' basis	/	/	/	Waste management	Environment Security
		Manage the supply of plant material and nursery activities	/	/	/		
D14	Licensing Department		/	/	/		Physical Security
D15	Department of Solid Waste Management & Public Cleaning/ Environment		/	/	/	Waste management	Environment Security

Table 5: City Council Division Enhancing Safe City Initiatives

Code	Department	Safe City Indicators					Domain
		Digital Security	Information Security	Infrastructure Security	Physical Security	Environmental Security	
D2	Corporate Department and Strategic Management Unit/ Sector of Corporate and Strategic Management	/					3
D4	Department of Information Technology Unit	/					3
D5	Department of Development Planning	/	/		/		1
D6	Engineering Department		/				3
D7	Department of Health and Environmental Services			/			3
D10	Building Control Department	/					3
D11	Society/Community Development Department				/	/	2
D12	Department of Enforcement	/	/				2
D3	Landscape Department					/	3
D14	Licensing Department	/					3
D15	Department of Solid Waste Management & Public Cleaning/ Environment					/	3
		6	3	3	2	3	

According to Table 5, the Safe City domain that was most highly used was Digital Security. The Department of Development Planning had the safest city domains, including Digital security, infrastructure security, and physical security.

This finding shows that the Department of Development Planning emerged as the primary hub for various Safe City domains, with Digital Security being the most extensively utilised. This department notably covered a spectrum of domains crucial to Safe City initiatives, encompassing Digital Security, Infrastructure Security, and Physical Security.

CONCLUSION

The study results are very important as they help other local authorities (LAs) identify the right benchmarks to use in their work towards a safe city approach. The approach taken by LAs is not only related to the physical domain, which focuses on preventing crime, but it also contributes towards other

elements of the safe city domains. This collective approach within the organisation helps to show that LAs located in the central zone of Malaysia are not only progressing through one specific department, but through all. The next study will explore various initiatives and strategies that can have a great impact in minimizing operation costs, while still improving the quality of life within the community. Eventually, a similar approach can be implemented in other municipalities and districts throughout Malaysia by making certain adjustments that are tailored to the local context.

REFERENCES

- [1] Embong, A. (2011). Urbanisation and Urban Life in Peninsular Malaysia. academic, 23-39. 040023-608 October 2023 15:41:47
- [2] Marshall, W. & Garrick, N. (2010). Street network types and road safety: A study of 24 California
- [3] Malek , J., & Ibrahim , M. (2015). Bandar Selamat dan Keselamatan Komuniti Bandar Selamat. Journal of Social Science and Humanities, 97-117
- [4] Davies, G.H. What Are the World's Safest Cities? Available online: <https://www.movehub.com/blog/worlds-safest-cities/> (Last updated on 20 Feb 2020 accessed on 7 November 2020)
- [5] Lacinák, M., & Ristvej, J. (2017). Smart City, Safety and Security. TRANSCOM 2017, 522 – 527
- [6] Aris Anuar, A. Bookhar, S., & Aziz, N. (2012). The Effectiveness of Safe City Program as Safety Basic in Tourism Industry: Case Study in Putrajaya. Social and Behavioral Sciences, 477-485.
- [7] Sidhu, A.M. (2005). The Rise of Crime in Malaysia – An academic and statistical analysis. Journal of the Kuala Lumpur Royal Police College, no.4, pp.1-28.
- [8] Wereda , W., Moch , N., & Wachulak, A. (2022, 1). The importance of stakeholders in managing a safe city. Sustainability (Switzerland), 14(1).
- [9] Hamdan & Norudin (2010) Customers' Satisfaction towards Counter Service of Local Authority in Terengganu, Malaysia in Asian Social Science (v6) p 197
- [10] Vitalij, F., Robnik, A., & Alexey, T. (2012). "Safe City"-an Open and Reliable Solution for a Safe and Smart City.
- [11] Shamsuddin, S., Azim, N., & Hussin, B. (2013). Safe City Concept and Crime Prevention Through Environmental Design (CPTED) for Urban Sustainability in Malaysian Cities. Retrieved from <http://TuEngr.com/ATEAShttp://TuEngr.com/ATEAS/V02/223-245.pdf>
- [12] Ceccato, V., & Lukyte, N. (2011). Safety and Sustainability in a city in transition: The case of Vilnius Lithuania. Cities, 83-94.
- [13] Al-Ghiyadh, Mohammed Abdul-Kadhum, & Al-Khafaji, Saba J. Neamah. (2021). The Role of Urban Planning and Urban Design on Safe Cities. IOP Conference Series: Materials Science and Engineering
- [14] Hino, K., Professor, A., Léon, E., Oni, T., Health Physician, U., Singham, G., Professor, A. (2021). Safe Cities Index 2021 New expectations demand a new coherence: <http://pqi.stats.gov.my/result.php?token=69fa6eecc9ee2be312df1edb7dd5ddb1>
- [15] Kamarudin, N., Noordin, n., Zakaria, Z., & Mustaffa, J. (2011). The future challenges of local
- [16] Abdul Khalid, S. N. (2010). Improving the service delivery: A case study of the local authority in Malaysia. Global Business Review, 11(1), 65–77
- [17] Azman, Farida, Dayang, (2009) The Mediating Effect of Empowerment in the Relationship between Transformational Leadership and Service Quality in International Journal of Business and Management (v4) p 3-5 cities. Urban Design International, 133-147
- [18] Department of Statistics, Malaysia. (2020, 11 February Tuesday). Retrieved from Time series population
- [19] Ministry of Home Affairs India. (2021). Safe City Indicators.
- [20] Laws of Malaysia. (2006). Town And Country Planning Act 1976. Local