ENCROACHMENTS AND URBAN MOBILITY: A STUDY OF HAWKERS' IMPACT ON SADDAR BAZAAR'S TRAFFIC FLOW"

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ABSTRACT

In any civilization, the formal organized sector and the informal unorganized sector are the main sources of resource-generating use for the urban economy. The urban poor in most Asian countries' cities make their living by working in the unorganized sector. Street vending is one way for these urban, impoverished people to make a living. Few hawkers, however, reside near where they work and take buses or two-wheelers to cover considerable distances. Hawkers' invasion indeed limits the amount of space available for commuters and walkers, which leads to traffic jams. One major issue that most people in a large metropolis like Karachi deal with daily is traffic congestion. Saddar is also home to Karachi's major coach station, which makes it extremely difficult to connect to other parts of the city. The unlawful occupation or an international organization's authorized usage of property and land is the reason for the encroachment in Saddar. The municipal authority has occasionally forced these sellers and hawkers out of the Bazaar through anti-encroachment campaigns. Many alternatives to the traffic plan are presented in the proposal, including rerouting public transportation, removing hawker settlements, and turning Saddar into a pedestrian zone. The ideas underlying this proposal form the basis of a future revitalization plan for Saddar and the area's cognitive map. If this plan is implemented, Saddar may frequently be transformed into the multi-class entertainment and recreational area that the modern, socially divided city sorely needs. Through a questionnaire study, information has been gathered from respondents and Saddar market visitors to identify the primary issues and observe the current circumstances of Saddar residents. Bring back Saddar's traditional way of life and turn it into a destination for tourists and shoppers alike.

Keywords: Public transit interchange, Transport infrastructure, Modal integration, Hawker's settlement.

INTRODUCTION

Unplanned transportation-related operations and the growth of hawker areas surrounding them have caused environmental degradation in many Asian cities over time (Singh, A.S., & Dev, M., 2023). Many of these places were formerly hubs of entertainment, culture, and leisure, and now house the cities' constructed heritage. One of these areas is Saddar, which has a strong influence on the town's ancient royal center (Malik F, 2018).



In Karachi, Saddar City is the most notable example of British colonial architecture. Immediately following their occupation of Karachi in 1939, the British established Saddar Bazaar (Jatoi, B. A., 2025). It was first constructed to compete with the old city's marketplaces. But following Sindh's acquisition by the British in 1843, it developed into a shopping center for Karachi's European populace, which was primarily made up of military and civil professionals (Laig, W., 2022). As Indian populations became more Europeanized, Saddar became their home. (Wandering in wonder, 2018)

Saddar City is the city's primary business district, with the central area being in the old Empress Market. Additionally, the city's port is close by due to the central Railway and its Central Terminus (Kazmi, A., Malik, I., & Malik, S., 2025). Therefore, it is essential to understand Saddar's history and revitalization efforts, which include rerouting the transportation system, relocating resident hawkers, and transforming Saddar into a pedestrian zone. (Hasan, A., et.al 2008)

1. BACKGROUND:

Karachi stands as one of the fastest-growing megacities in the world, both in terms of population size and urban expansion. According to census data, the city's population surged from 11 million in 1998 to over 22 million, effectively doubling in a short span (Rahman, M. M., 2020). Today, Karachi accommodates approximately 22% of Pakistan's urban population and about 10% of the nation's total population (MPGO, 2020). The capital of the Sindh area is also Karachi. It is home to 30% of Sindh's overall population and 62% of its inner-city population. The city may be a multiethnic town as a result of the 1947 migration from Bharat and the ongoing migration from various parts of Pakistan (Raza, M, 2014). The research region includes Karachi's business district. Karachi's main retail district, Saddar, is located in the city center and features bustling marketplaces (Kausar, A., et al, 2022).

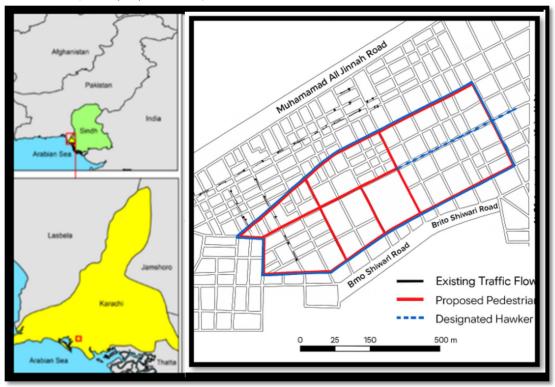


Figure 1: Boundaries of Saddar Area in Karachi

During the British conquest of Sindh in 1839 by the regiment of British commander Sir Charles Napier, this small settlement developed into a bustling port town (Karachi harbor). At that point, the term Karachi was used for the first time rather than Kolachi (Soomro, T. A., 2020). The city was divided into 18 quarters by the then-municipal engineer. These areas were designated as the city's historic center since the city grew around them (Stewart, F. M.2023).



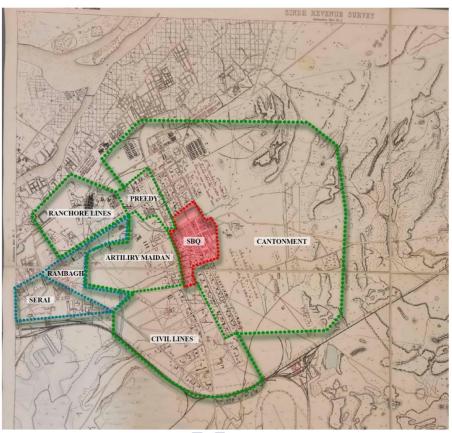


Figure 2: Map of Karachi – Colored Lines Depict the Boundaries of Historic Quarters Source: Kurrachee Past, Present & Future – Alexander F. Baillie 1997 Edition



Figure 3: Year 1930 – Street View of Tram Moving on Bund Road Showing Jehangir Kothari Building at the Back in Serai Quarter Source: © Archive 150 – April 2017



The figure captures a moment in time when the city's public transportation system prominently featured trams, which were a key mode of travel during the early 20th century (Knowles, R. D., et al, .2020).



Figure 4: Year 1910 - Elphinstone Street View in Saddar Bazaar Quarter Source: Archive 150 - April 2017

By establishing road networks, electricity, and automobile transportation systems like railroads and tramways, the colonial rulers brought modern advancements to their European-populated areas (Esteves, A., & Amaral, I., 2024). The streets in their colonized communities were paved, had sidewalks, and were dotted with street lamps (lights) because the British were eager to restore the spirit of their birthplace. (Morris, J., & Winchester, S., 1983)

2.1 Transport system in Saddar Karachi

Karachi's transportation connectivity problems have gotten worse despite its prominence. Due to this failure, people are compelled to travel on the roofs of buses-that is, illegally-and wait at bus stops for a long time to get a ride (Akber, S., 2024). The number of conveyance registered buses has decreased from 22,313 in 2011 to 12,399 in 2014, with 9,527 of those buses operating (Khan, M, et.al, 2015). Traffic blocking's impact on the city reduced mobility, in addition to sound hazardous waste, high concentrations of nephrotoxic air, environmental deterioration, and urban landscape destruction (Adigun, O. J., & Odeleye, D. A., 2025).In particular, declining values and inflated direct and indirect costs hurt bus transportation when buses are slowed down by traffic, which lowers fleet productivity (Hasan. A, et.al 2008)

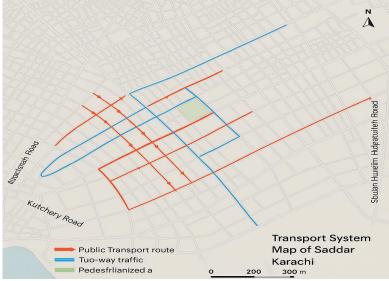


Figure 5: Existing Transport system map of Saddar Karachi



The map shows a dense and intricate network of roads running through Saddar, some of which are major arterial roads like Shahrah-e-Liaquat, Preedy Street, M.A. Jinnah Road, and Saddar Davakhana Road. Roads are highlighted with varying thicknesses or color intensity, possibly to indicate traffic volume or hierarchy (e.g., primary, secondary, tertiary roads). Sidewalks or pedestrianonly zones are illustrated, particularly near Empress Market, which is a known commercial hub frequently congested with foot traffic and informal vendors.

The fact that in 2013, only 0.85% of cars in cities were buses and 4.04% were three-seater motor rickshaws (three-wheeler vehicles) may be used to illustrate the importance of the issue, whereas cars accounted for 81.21% and motorcycles for 49.59% of all vehicles. (for details, see Table 1).

Table#1: Mode	el distribution	of vehicles and	l passengers	and the	number	of vehicles r	egistered	in
		Kaı	achi in 201	3				
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(50	ource	: Transport ar	nd (Commu	nica	atio	n l	Dep	arti	ner	nt, I	Ka	rachi	N	Iunicipal	Corporation	n)
		See	-														

Sr. No.	Type of Vehicles	Total Registered on Road up to 31.12.2013	Newly R	egistered	Total Registered on Road 2013	Total Registered on Road 31 Dec. 2013		
			Jan- March	April- June	July-Sept.	Oct Dec.		
01.	Mini Bus	16,087		68	230	109	407	16,494
02.	Buses	6,352		15	36		51	6,403
03.	Mini Truck	13,510	288	185	134	123	730	14,240
04.	Truck	16,146	264	162	155	102	683	16,829
05.	Van/Pick-Up	109,243	2,111	6,860	1,109	178	10,258	119,501
06.	Taxi	47,049		Ĵ				47,049
07.	Rickshaw	123,129	2,183	5,028	5,797	5,568	18,576	141,705
08.	Lifter	2,994	41	20	13	15	89	3,083
09.	Tractor	3,624	18	12	59	47	136	3,760
10.	Tanker	2,999	6	22	21	3	52	3,051
11.	Pvt. Vehicle	1,047,933	20,048	11,467	14,185	9,012	54,712	1,102,645
12.	Motorcycle	1,452,526	61,466	46,682	49,859	39,410	197,417	1,649,943
13.	Ambulance	2,029		90	49		139	2,168
14.	Coffin Carrier	72						72
15.	Disable Person	100	2	1	2		5	105
16.	Catholic Trust	107	1			1	2	109
17.	School Bus	238	4	4	11		19	257
18.	Church	48	1				1	49
	Total	2,844,186	86,433	70,616	71,660	54,568	283,277	3,127,463

The table shows that the 2013 vehicle registration data for Karachi reveals a significant increase in the city's vehicle population, with motorcycles leading at 1.65 million due to their affordability and ease of mobility. Private vehicles followed closely with over 1.1 million registrations, while rickshaws—a vital part of informal public transport—reached 141,705. In contrast, public transport options like buses and minibuses saw minimal growth, indicating limited investment and declining reliance on formal transit systems. Special-use vehicles, including ambulances and school buses, remained comparatively low in numbers. The overall trend highlights growing pressure on Karachi's Road infrastructure and the urgent need for improved traffic and transport planning.



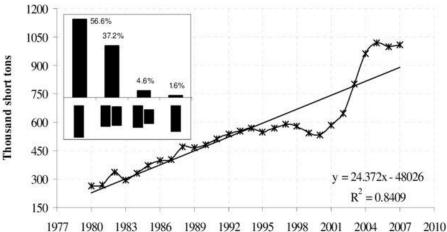


Figure 6: Growth in registered vehicles and urban population (in percentage). (Data source: Qureshi and Huapu, 2007, and Urban Resource Centre, Karachi)

2.2 The Encroachment by Hawkers of Saddar Bazaar

Encroachment by hawkers in Saddar, Karachi, occupies between 40% to 70% of street widths, significantly contributing to traffic congestion and limiting pedestrian movement. In Third World towns, hawkers set up shop on sidewalks and sometimes even on the side of the road (Shah, A., & Qureshi, T. A., 2022, March). The areas where the impoverished reside, work, or visit are where their popularity is felt. This is frequently caused by the benefits of land, city traders, or traders, and the lack of preparations for their place of sale, and the need for their products. When social issues arise, the state government tends to ignore them. It frequently occurs in Third World cities like Manila, Jakarta, Bombay, Karachi. and (Muhammad S, 2000).

Governments have occasionally sought to bring back street vendors. This rehabilitation hasn't been difficult, and it's not seen as a connection between hawkers and public transportation. Authorities in the Saddar region carried out a significant eviction of hawkers in 2001 (Ahmed, N., et al, 2021). Within the same area, they were positioned between the main roads and the lanes. After rejecting this relocation, they were able to bribe their way back after three weeks (Jamall, S. M., 2024). The URC had resisted the eviction, and at a board meeting, it was decided that a workable plan for Saddar hawker rehabilitation should be created (Anwar, N. et.al 2021). It was also established that hawkers were essential to the town's low-income citizens and that, at the same time, their families would become impoverished if they were forced to leave and relocate during an inflationary and recessionary period (Chua, B. L., et al, 2025).



Figure 7: Traffic rushes and hawkers of Saddar



2. Data Collection and Field Observations The study's purpose is to learn about the needs, challenges, amenities, and facilities of the Saddar bazaar vendors and commuters who use local transportation in the Saddar region. In the meantime, local authorities have gathered several pre-existing maps.

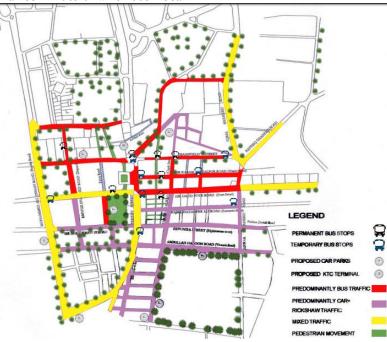


Figure 8: Existing and proposed traffic routes at Saddar Karachi

Sources: Karachi: The Transport Crisis by Arif Hasan with the Urban Resource Centre, Karachi The map illustrates a transportation plan for the Saddar area, highlighting various traffic zones and infrastructure elements. Permanent bus stops are marked with dark blue icons, while temporary ones appear in light blue. Proposed car parks are shown as grey dots, and the suggested KTC terminal is represented by red starburst icons.

Traffic flow is categorized with red-shaded roads indicating predominantly bus traffic, yellow for car and rickshaw traffic, and purple for mixed traffic. Pedestrian movement is designated by pink dashed lines, reflecting areas prioritized for foot traffic and walkability.



Figure 9: Location of existing hawkers, Encroachers, and leased market

This map provides insight into the current occupation of public space, including the legal vs. informal presence of markets and hawkers. It's valuable for urban planning, aiming to balance formal market activity with public space restoration and long-term infrastructure regulation.

Saddar's problems will only be resolved as part of a larger town planning exercise that addresses the town's transportation and traffic problems. As a Model Restoration Proposal, a cognitive map and plan for Saddar's rejuvenation have been created. Because residents ignore the truths that this statement contradicts, it is difficult to contrivance.



Main nodes and paths Legends Selected Area Landmarks Main Routes of space

Figure 10: Mental Map of Key Landmarks in the Saddar Area, Karachi

The red location markers on the map highlight and visitors. Nearby, the Metro Bus Stop key landmarks within the Saddar area of Karachi, facilitates public transport access for commuters. serving as major points of interest for both locals





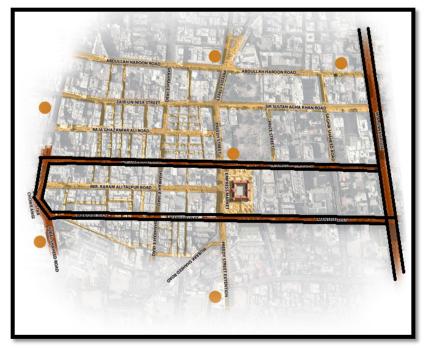
Most Valuable Urban Spaces Howkers or Encroachment

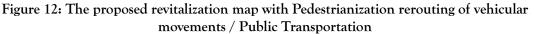
Figure 11: Space recognition Map

As shown in the space recognition map, hawkers and encroachment occur in the most valuable urban space, like Empress Market, which causes huge traffic flow problems. A replacement concept for the Saddar bazaar is depicted in Figure 11, with the principal approach street designated for public transportation and a

demarcated section of the market area designated as a non-motorized sector. Experience has taught us that pedestrian-friendly streets are very beneficial to businesses. Second, it gives the more remote regions that Karachi serves greater chances for better transportation services.







The all public proposal general uses transportation returning from the FTC side of MA Jinnah Road, which currently ends at Mansfield Shahrah-I-Iraq, Saddar Street, Dawakhana, and surrounding streets, to turn off Adigun, O. J., & Odeleye, D. A. (2025). The at the Lucky Star Chorangi, cross the Dr. Daudpoto Road, and return to MA Jinnah Road. By following these trends for transportation routes, the town's traffic issues can be reduced.

Conclusion: 3.

The main issue in Saddar Town is encroachment. It has flourished, and the government appears to have completely failed to keep the issue under control. Many store owners have set up roadside stalls in flagrant disregard for the law. There is extremely little room on streets and sidewalks for cars and pedestrians since sellers occupy between 40% and 70% of the width of streets and roads, and shopkeepers and vendors also use the majority of pathways. It is necessary to re-plan the areas where they are currently intruding to make room for them without negatively impacting the current and planned transportation infrastructures. The proposed map includes rerouting public transport to decongest central roads, converting key areas into pedestrian-only zones to improve walkability and the overall shopping experience, and formally integrating hawkers by allocating specific vending zones. These measures aim to balance economic activity

with urban mobility and restore functional public space in Saddar.

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