

Linear Commercial Street Transformation: A Human-Scale and People-Centered Urban Design Strategy for Al Maabilah, Muscat

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Extended Abstract

This study examines the redevelopment of a major local main road within Al Maabilah's Mixed-Use District, Muscat, into a linear shopping street aimed at enhancing livability, urban accessibility, and pedestrian experience. Modest in scale with a single lane in each direction, the road is a crucial link that connects the district's exit from the expressway to Al Salam Street, an urban main road that connects Al Maabilah with Al Khoudh and Sultan Qaboos Main Street. Surrounded by business activity and several shopping stores along with restaurants on the side, the street functions as the commercial as well as the social backbone of the district.

Despite its strategic purpose, the road now reflects several issues common to a car-centric urban form: recurring traffic congestion, absence of pedestrian and cycling facilities, and unsafe or underused public space. These conditions have been documented in other urban neighborhoods in Oman, where microscale audits reported limited pedestrian accessibility, monofunctional land use, and barriers to walkability [1], [2], [3]. The selection of this particular street is based upon its transitional urbanity—connecting high-speed expressway traffic to concentrated local business—and its representative status of developing mixed-use spines throughout suburban Muscat.

Rod Burgess describes Compact City as an urban design that fosters sustainability through concentrating activities and functions. The four principles it highlights are density facilitating access and efficiency, intensification of the existing city fabric, mixed-use to integrate functions, and human scale to increase livability and climate responsiveness. [4]. This project proposes a context-sensitive urban design intervention that prioritizes people-centered planning. Its core strategies include transforming movement networks by integrating transport modes, occupying spaces through building infill and public spaces, ensuring human-scale building proportions, and promoting active frontages. Together, these elements highlight how street-level design quality significantly influences perceptions of city livability [5].

Design measures comprised street audits, observational mapping, and typological analysis of neighboring plots. The intervention realigned surface area for pedestrian-friendly spaces added micro-plazas and shaded walkways, and enhanced connectivity through redesigned crossing points and curb extensions.

Finally, the project recasts the street as a civic corridor rather than a traffic artery. It promotes local trade, accommodates walkability, and reinforces a city center's urban character. It further advances Oman's Vision 2040 objectives for sustainable urban planning and inclusive public space design. [6].

The project sets an example for the adaptive reuse of local roads into multifaceted urban amenities. Other commercial strips in Muscat, like those along Al Khoudh, can adopt this model to create more accessible, lively, and community-focused settings. It also demonstrates the intervention potential for evidence-based small-scale work to inform the large-scale transition to sustainable Gulf cities.

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