ARC'18

مؤتمر مؤسسة قطر السنوي للبحوث QATAR FOUNDATION ANNUAL RESEARCH CONFERENCE

البحث والتطوير: التركيز على الأولويات، وإحداث الأثر

R&D: FOCUSING ON PRIORITIES, DELIVERING IMPACT

20-19 مـــــارس <u>19-20 MA</u>RCH



Unlocking human potential.

Social Sciences, Arts and Humanities - Poster Display

http://doi.org/10.5339/qfarc.2018.SSAHPD135

Towards an integrated urban design: investigation of tod in the cultural core of doha MSHEIREB SOUQ WAQIF NATIONAL MUSEUM

Heba ElGahani*

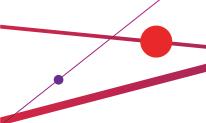
Architect, Candidate in the Master's Program in Urban Planning and Design (MUPD) at Qatar University * he1002106@qu.edu.qa

Sustainable urban design of cities in the 21st century is challenged by serious problems centered around the over-dependency on the car as a the main transportation system. The car has generated problems of urban inefficiency, contributing to traffic congestion, pollution, fragmentation of urban fabric and other environmental and social challenges. In the context of Doha, Capital City of the State of Qatar, the overdependency on the car is justified by the lack of alternative modes of transportation that could support the need to connect fragmented urban districts and provide an effective solution to urban sprawl. Therefore, the implementation of an alternative transportation system in Doha, represented by Qatar Rail, is creating potential for a urban development that addresses recent challenges of livability, sustainability and urban growth in cities. Referring to applicable cases in other countries and regions that have successfully implemented alternative transportation systems, the planning of LRT (light rail transit systems) and transit villages (or Transit Oriented Developments, known as TODs) is proving the workable approach of urban revitalization. Thus, the fragmentation of the urban development of Doha must be tackled through this approach. The cultural core of Doha is an attractive site for an integrated urban development that considers urban livability, connectivity and sustainability of the public realm. This research study explores (1) how public transit systems can be utilized as means of urban transformation and regeneration in the cultural core of Doha; (2) the progress and implications of the development of the new transportation system for the planning of Doha's built environment; and (3) the extent to which Transit Oriented

© 2018 The Author(s), licensee HBKU Press. This is an open access article distributed under the terms of the Creative Commons Attribution license CC BY 4.0, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.



Cite this article as: ElGahani H. (2018). Towards an integrated urban design: investigation of tod in the cultural core of doha MSHEIREB SOUQ WAQIF NATIONAL MUSEUM. Qatar Foundation Annual Research Conference Proceedings 2018: SSAHPD135 http://doi.org/10.5339/qfarc.2018.SSAHPD135.



Developments (TODs) are strategic for sustainable urbanism and smart growth in Qatar. The aim of the research is (1) to explore and investigate the extent to which the spatial form of the built environment of the cultural core of Doha can be enhanced through TOD; (2) to amplify cultural value, social interactions and/or social capital and, therefore, contributing to creating a more livable environment. Data is obtained through rigorous site analysis of the multiple urban layers of three selected sites within the cultural core of Doha. This approach is directed toward the understanding of the remodeling potential of the cultural center of Doha responding to the introduction of the new rail system. The implementation of a wellstructured TOD is expected to foster a cultural revival of the city's cultural core and provide sustainable and livable choices that support sustainable urbanism and focuses on quality of life within cities of today. The research study explores the locations of Qatar Rail metro stations in three vibrant areas of Doha's cultural core. The three areas are (A) Msheireb Downtown Doha, (B) Souq Waqif and (C) the National Museum of Qatar. The exploration includes review of the relevant literature on the urban history of the three selected cases, in addition to a site analysis that considers the location of the metro stations and adjacent districts. The research study concludes by envisioning designed models of TODs, based on resultant planning strategy and development guidelines. The final urban design schemes propose an integrated mix-use development, comprising residential, business, and commercial activities, located within a walking distance from the three transit stations in Doha's cultural core, introducing a new compact and livable community development. Findings are contributing to the application of TODs in Qatar by enhancing the strategic planning of Qatar Rail to effectively incorporate such concept within the planning of the new project. Also, this research study contributes to the provision of an applicable model for the implementation of TODs in Qatar and in the Middle East Region (MENA), addressing the enduring challenges of urbanism and urban planning in the Islamic city.