

CLIMATE CHANGE AND ENVIRONMENT IN THE ARAB WORLD PROGRAM

Sustainable Transport Series

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The Climate Change and Environment
in the Arab World Program aims to
understand the climate change and
environment policy process in the region
and define the most appropriate policy
recommendations by linking develop-
ment in applied sciences on issues related
to climate change and environment to
social sciences.

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The Experience of AUC and the Need for Public Transportation for New Cairo, Egypt

Summary

The American University in Cairo's physical relocation in 2008 from its historic downtown campus to an entirely new campus in New Cairo, a new town on the outskirts of Greater Cairo has caused a lot of changes in the transportation habit of students, faculty, and staff. This was a response to the Egyptian government's strategy to alleviate congestion by moving central institutions into the surrounding desert areas and thus constructing more and larger motorways. Taking the AUC as an example showed that the relocation to the New Cairo campus did not provide better commuting conditions, and further transportation strategies need to be implemented in order to achieve a more sustainable transportation plan.

Recommendations

An important lesson learned from this case study is that a more sustainable public transportation system needs to be designed based on adequately understanding the targeted users, and incorporating a variety of social, economic, and cultural functions. AUC has welcomed the recent initiative to build and operate a "supertram" between Heliopolis and the New Cairo campus. Research among the AUC community indicates that such a tram would offer options to a significant proportion of the AUC community, but by no means all of the community members.

Other options that should be considered are:

- Rapid Bus Transport system of express buses linking major centers in the urban core to New Cairo and the new campus.
- Improving traffic management,
- The adequate policing of intersections,
- Managing parking spaces,
- Creating appropriate taxi and micro-bus stops,
- Improve drivers' behavior within New Cairo and especially along the already congested and over-crowded Road 90.

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Problem Statement and Key Messages

Compounded by the city's rapid demographic and geographic expansion, public transportation is one of Greater Cairo's biggest sustainability challenges. The recent development of desert settlement outside the urban core is not unlike the planned suburban expansions of Heliopolis and Maadi over a century ago in terms of strategic urban planning, but unlike those successful developments, the new desert cities such as 6th of October, 10th of Ramadan, and New Cairo are not tied to the core with a purpose built public transportation system. Instead, road connections, increasing traffic capacity, and private transport have been the only actions taken to facilitate the movement of people between the established urban areas and the new settlements. The experience of the American University in Cairo (AUC), which relocated from its historic downtown campus adjacent to Tahrir Square in 2008 to a much larger and purpose-built facility in the developing community of New Cairo some 35 kilometers to the east, provides an excellent point of departure for assessing public transportation policy in light of the absence of any effective government interventions to integrate the new peripheral urban settlements with the established urban core of Cairo.

The AUC case study suggests that any public policy for sustainable mass urban transport should put priority on enhancing the mobility of people before the mobility of vehicles (CTMP 2002). Emphasizing people rather than vehicles implies recognizing the importance of the diversity of the human population, and, in particular, differences in socio-economic status and livelihood strategies. No one solution will satisfy the needs of all, and a range of alternative solutions will be needed to ensure sustainability of the transportation system. The AUC case highlights the importance of recognizing the significance of an intra-urban commuter culture in Greater Cairo. For the new settlements, the geographic location of one's place of work is often separated from one's residence. People choose to commute rather than spatially integrate where they live and work. This has put increasing pressure on an already overburdened public transport system and, in the case of the satellite settlements, and overwhelming dependency on private vehicles, either personal automobiles for those who can afford them, or informal group taxis for those who cannot. The end result is often surprisingly high levels of traffic congestion, time delays, excess fuel consumption, and higher levels of pollution in public areas that were designed to be spacious, clean, and congestion-free.

Sustainable transportation needs to be people-centered and multi-faceted, with a variety of options provided and a focus on reliability, efficiency, and mutual benefits for all stakeholders (travelers, transport operators, employers, and government). Among strategic initiatives that could be implemented quickly in New Cairo and that could deliver immediate gains are traffic management and parking measures, including demarcating spaces for taxi and micro-bus stops along the major arteries. For the longer term, sustainable solutions would involve an expansion of the public transport system, both vehicular and non-vehicular and a revision of transport pricing. The recently approved plan to construct a "supertram" linking Heliopolis with New Cairo is clearly a step in the right direction, but many strategic issues surrounding the project remain unclear. Statements by officials that public bus services will be improved or introduced into areas currently not served are also welcome. Efforts to improve public transport should be coupled with measures to make the use of private vehicles more of a luxury than a necessity. The objective is to facilitate the movement of all categories of travelers to move easily within New Cairo and between New Cairo and the rest of the metropolitan area.

The relocation of AUC and transportation implications

After operating for almost 90 years on a small downtown campus of less than three hectares scattered among four city blocks, AUC relocated to a new, purpose-built campus of 110 hectares in 2008. The site chosen was in New Cairo, one of several newly developing urban communities located outside the historic Nile Valley urban core of Cairo. Connected to the rest of Greater Cairo by the circular Ring Road, the new AUC campus is approximately 35 km east of the old Tahrir Square campus downtown.

From the beginning of the relocation process, AUC administrators were concerned about the transportation implications of the move. It was well recognized that for all intents and purposes, there was no public transportation system serving New Cairo or connecting the new settlement with the rest of Greater Cairo; nor was one likely to emerge in the near future. A study of student residence locations revealed that more than half the student body resided either closer in distance or commuting time to the new campus site as opposed to the downtown site. University policy was to encourage students to begin living on campus, and dormitories for about 450 students were built on campus. Provisions were made to encourage faculty and staff to relocate to New Cairo, and land was obtained and sold as lots for faculty and staff to construct homes within a half kilometer of the campus. In addition, the government assured university officials that an extension of the Cairo Metro was planned to New Cairo and that a station would be built adjacent to the AUC campus entrance. A significant number of parking lots were constructed on the new campus. In 2007, the last year before the move, the university contracted a private transportation company to provide bus services to the students, faculty, and staff. Sixteen separate routes were identified to bring AUCians from all over Greater Cairo, including at least one bus each day between the distant settlements of 6th October to the southwest and Shubra al-Khaymah to the north, each being a more than 100km commuting round trip.

Among the users of private cars, only 19% carpool.

In the spring of 2012 and again in 2013, surveys were conducted among AUC students, faculty, and staff with the objective of discovering the ways in which AUCians were getting to campus. In addition, the records of the bus service were examined to cross-check ridership and observations were made concerning parking arrangements and the use of private vehicles for transport to and from campus.

What did the survey indicate?

During the last two academic years, the AUC community on the New Cairo campus has numbered about 9,400 people. The population can be differentiated among 7,000 students (graduate and undergraduate, full and part-time), 800 faculty (full- and part-time), and full-time staff. Of these, only about 450 students reside on campus during school terms, together with a handful of administrative staff in the dormitories. Not counting dorm residents, only 8% of AUCians of all categories live in the New Cairo settlement. The rest commute to campus an average of 65km each day. Faculty and staff who previously worked on the old downtown campus report significant increases in their commuting distances since the move to New Cairo. Very few of them have relocated their residences to New Cairo, and instead prefer the longer commute to the difficulties of relocating their homes in order to be closer to work. Two-thirds (68%) of AUCians rely primarily on the bus service to commute to campus, and commuting by personal private car represents 30%.

The Issam Fares Institute for Public Policy and International Affairs (IFI) at the American University of Beirut (AUB)

was inaugurated in 2006 to harness the policy-related research of AUB's internationally respected faculty and other scholars, in order to contribute positively to Arab policy-making and international relations. IFI is a neutral, dynamic, civil, and open space that brings together people representing all viewpoints in society. It aims to: raise the quality of public policy-related debate and decision-making in the Arab World and abroad; enhance the Arab World's input into international affairs; and, enrich the quality of interaction among scholars, officials and civil society actors in the Middle East and abroad.

The residual 2% get to campus by walking, riding a bicycle, or taking a taxi. Remarkably, almost none of the respondents reported taking the few public buses or utilizing the shared taxis (microbuses) that operate in large numbers up and down Street 90, the traffic corridor that connects the AUC campus with the Greater Cairo ring road. Perhaps these options are avoided by AUCians because the university has provided a better alternative in its own bus service. Among the users of private cars, only 19% carpool (i.e., share the ride with at least one other AUCian).

The AUC case study indicates a very high degree of institutional dependency on long distance commuting to campus, with particular reliance on two forms of transport: the university supplied bus service and privately owned automobiles. Although students are being charged a modest fee (equivalent to about 2.5% of tuition) for the bus service, faculty and staff are not charged. The bus subsidy contributed substantially to an operational deficit for the university in 2013, with a consequent crisis in what commuting services the university could continue to provide and how these could be financed. Having begun with parking fees of about \$1.50 per day, the university found itself having to renegotiate with students to reduce or eliminate parking fees under threat of a strike, and fees were subsequently cut in half or eliminated altogether for carpoolers. Given the lack of any public transportation alternatives, the university tended to view as the only option the shifting of the burden of transport from the institution to the individual community member.



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