



Urban Mobility: A key challenge for the future of the Mediterranean cities?

Two in every three inhabitants of the countries bordering the Mediterranean live in urban areas. While walking remains a dominant transit mode in the cities to the south and east, public policies encouraging mass motorisation as well as the deterioration of service quality in public transport have driven uncontrolled urban sprawl and increased car dependency in most cities.

Given the expected effects of climate change, the historic vulnerability of the Mediterranean cities can but be exacerbated. Whilst producing fewer greenhouse gases, these cities are nonetheless more affected than other regions around the globe, putting them in the front line for the drawing up of adaptation strategies to climate change and for revisiting their modes of development.

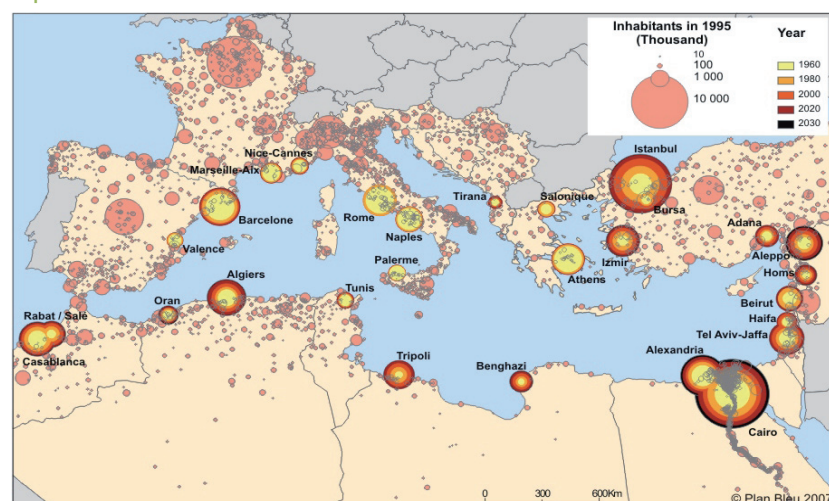
Relatively unsustainable conditions, with worrying prospects

Most of the cities to the south and east but also in some on the northern shore show varied yet converging trends:

- A constant increase in demand for travel, closely linked to urban sprawl and the uncoupling of home from work.
- Widespread congestion along the main thoroughfares and, consequently, a drop in travel speeds.

- Mass motorisation dynamics encouraged by the opening up of the markets and the introduction of consumer credit.
- Recurrent shortcomings in public transport provision in terms of servicing, level of service and also inter-modality.
- Constantly increasing GHG emissions linked to the transport sector- road transport in particular- which depends heavily on fossil fuels.

Population distribution



Source: Plan Bleu

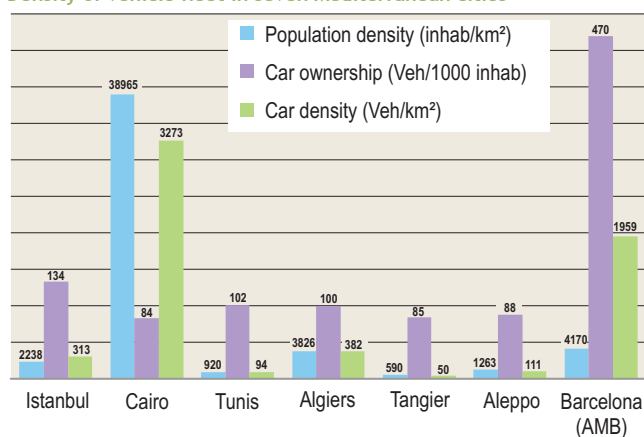
Gradual awakening to the stakes relating to urban mobility

The urbanisation processes in the cities to the south and east along with certain cities on the northern bank are marked by the predominance of extensive reasoning, triggering informal and uncontrolled development dynamics. However, the Algiers metro, the extension of the Cairo metro, the bus rapid transit (BRT) lines in Istanbul and the tram projects in Morocco and Tunisia are all the result of public policy aimed at developing public transport. Such examples illustrate a recent awakening on the part of the public authorities to

the stakes relating to urban mobility issues. Yet integrated transport/urban planning approaches are still few and far between. More often than not, the practices of both public and private players alike are still governed by operational reasoning rather than local area concerns. This is reflected in the importation of generic urban products inspired by international standards and clearly dependent on the car.

With the exception of Cairo, walking continues to be the main means in the cities to the south and east. Albeit playing a pivotal role in Barcelona or Lyon as feeders into the major public networks, public urban project designers tend not to concern themselves with these soft modes. Examples where public areas have been placed at the very heart of integrated town planning/transport approaches in terms of inter-modality, pedestrian accessibility or urban regeneration are sadly lacking in most of these projects. Whilst still not having reached the levels seen to the north, car density in the cities is following a constant growth curve. Public policies are struggling to reconcile the need to reduce car dependency with public aspirations towards the consumption patterns seen in more developed states.

Density of vehicle fleet in seven Mediterranean cities



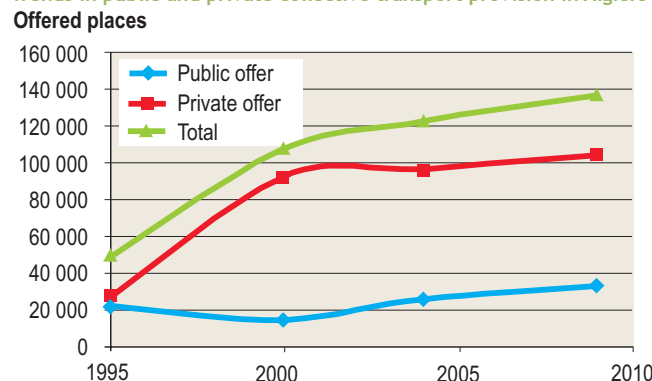
Source: Plan Bleu

Inadequate public transport service provision

To the south and east, public transport rarely provides satisfactory conditions of comfort, regularity of service or safety. Inter-modality is relatively undeveloped. Routes are overloaded, vehicles often dilapidated and rarely air-conditioned ; in the absence of priority traffic conditions, journey times are long and fares do not always permit connections. They consequently continue to present a negative image and would appear to be intended for captive populations with no access to a car.

Specialised school, university, administrative or private transport is increasing in the face of these shortcomings. And as an immediate response to daily mobility needs these mechanisms are starting to compete directly with public transport.

Trends in public and private collective transport provision in Algiers



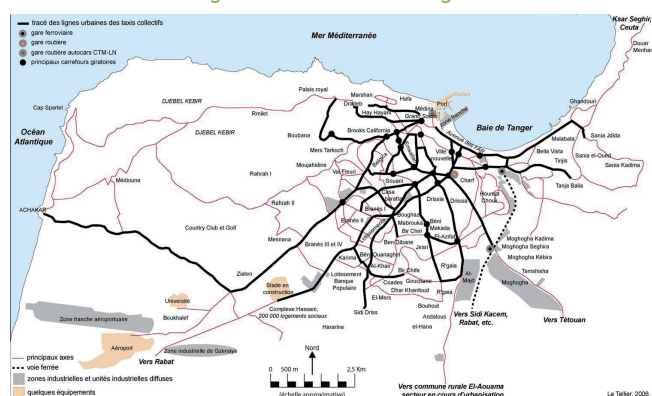
Sources : Plan Bleu computation, Plan Bleu case study: *Urban mobility in Algiers: trends and prospects*. Safar Zitoun Madani, Tabti-Talamali Amina (2009).

Informal transport, collective taxis and minibuses are also some of the main players in urban transport. They are developing in line with extensive urbanisation dynamics, where institutional provision is unable to keep pace with growing demand. With the exception of Tunis, the informal sector comprises a large share of the market, playing an absolutely pivotal role in Tangier.

Built on private investment and as a major creator of jobs, it comprises a crucially important socio-economic sector.

These circumstances render coordination between operators more complex and hamper the introduction of global and integrated transport provision within the cities.

Urban lines of the large collective taxis in Tangier



Source: Plan Bleu, Case study *Urban mobility in Tangier: trends and prospects*. Le Tellier Julien, Debbi Fathallah (2009).

Marked environmental impact

The region features a set of specific natural factors which encourage the production of ozone. Calm, anti-cyclonic weather conditions generate temperature inversion phenomena, which can give rise to virtually permanent pollution domes in many cities such as Athens, Cairo, Genoa, Barcelona or Marseilles-Aix. These phenomena lead to a concentration of the main chemical (CO, NO_x, SO₂) and physical (fine particles) pollutants, which may well create or aggravate respiratory conditions (allergies, asthma...).

Several examples of pro-active public policies intended to reduce emissions from transport exist: ecological toll

systems, bonus-malus and scrappage premiums to the north, replacement of the taxi fleet with vehicles running on natural gas in Cairo or the conversion of buses/vehicles to Liquefied Petroleum Gas in Turkey and Algeria. However, urban transport is one of the main causes of localised pollution through fine particle concentration. The dilapidated state of the car, bus and collective taxi fleets as well as the decrease in travel speeds triggered by major congestion on the road networks are all factors which seriously aggravate emissions

A lack of urban governance

To the south and east as to the north, urban sprawl is spilling over administrative boundaries and tending to disconnect area administrative organisation from its real function.

City governance to the south and east is marked by the predominant role of the State, major administrative centralisation and a lack of autonomy at the intermediate levels. The limited attraction of the public service and the fact that urban expertise is scattered amongst a multitude of institutions both public and private alike undermines local technical capacity. Operational reasoning predominates and the ability to regulate the private sector is dwindling.

Confusion regarding the distribution of competence along with institutional rivalry can give rise to competition between institutions in a given area and undermine the consistency of public action. The frequent setting up of autonomous agencies responsible for implementing a territorial project does nothing to support conventional administrative structures. Many coordinating bodies do not enjoy adequate supervisory powers to allow them to play their role as arbitrators.

Limited capitalisation on knowledge

Most of the cities reveal recurrent data shortcomings: lack of reliability and patchy information where it exists at all. Where it does exist, the data has often been produced for a specific project, limited in time and space. As far as air quality is concerned, measuring stations do in fact exist, but their networks, monitoring and the circulation of the results are still inadequate and the lack of indicators of impact on public health can only be deplored, particularly as far as respiratory disease is concerned.

Under these circumstances, local practitioners and decision takers more often than not lack the basic elements of knowledge during both the design and assessment phases of sectoral plans and programmes.

Towards suitable public policy

By controlling demand

Public transport provision and, more generally speaking, the major urban networks, are unable to keep pace with growing demand for mobility. The case of Cairo with its record density clearly illustrates how striving for greater density is not in itself enough to hope to address the interaction between travel and urbanisation.

Whilst policies intended to contain urban sprawl should be seen as a priority for public action, the role of the car in the city is also being challenged. The point is to encourage the regulation of car use rather than to promote the « car-free city ». Depending on the various situations encountered, incentives such as developing public transport provision, renewing the car fleet or adjusting the road network can be combined with coercive measures such as the implementation of routes with their own exclusive lanes, dissuasive parking policies or traffic restrictions in the densest areas (pedestrianisation, ecological urban tolls...).

Bus rapid transit (BRT) line in Istanbul



Photo Haluk Gerzeck

By establishing multi-modal approaches to provision

Setting up a multi-modal network within the conurbation coordinated by a sole authority should be one of the main objectives of public urban transport policy. All too often, the institutional operators' own operational reasoning impinges on the public's needs.

Public authorities and transport operators should place the user at the very heart of public policy and project design.

Due to its ability to adapt dynamically to demand, informal provision generally tends to provide a good level of service. Whilst precious little account is taken of it by the local authorities in network planning and project design, informal transport nonetheless plays a key role as a feeder for mass transport. Limited in space and structured around a captive fleet, it could also present a real opportunity for disseminating new, green technology (non-fossil fuels, electric and hybrid vehicles...). Its full integration within global provision needs to be advocated.

By raising the awareness of decision makers about the health and environmental stakes

Although the issue of combating global warming has already drawn public decision makers' attention to the importance of curbing greenhouse gas emissions, awareness of the issues relating to public health and more particularly air quality remains limited. Innovative monitoring and observation

mechanisms have been introduced in some cities such as Marseilles and Nice, but a major overhaul of methodological approaches needs to be conducted in order to assess the socio-environmental impact of urban transport on the public. The dissemination of these new observation instruments could lead to environmental issues being included in strategic planning exercises.

Consolidating the urban contracting authority role of the Mediterranean cities

Given the major challenges which Mediterranean cities will be called upon to address in terms of demography and adapting to climate change, three key ideas should be given priority:

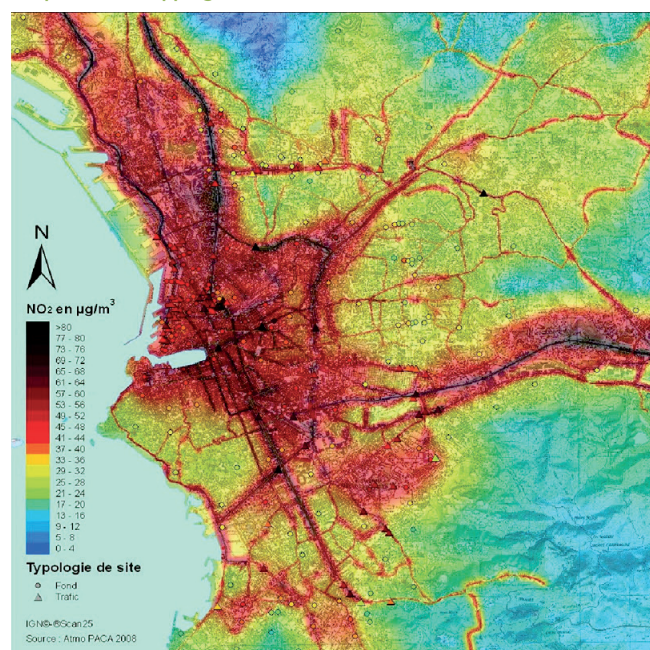
► **Furthering knowledge of urban dynamics:** the creation of monitoring and assessment tools built upon basic urban mobility data should be furthered with the consolidation of local technical expertise.

► **The territorialisation of public policy:** the new city scale, including use- rather than supply-based approaches should be taken into account as a priority in order to improve coordination between local actors and practitioners.

► **Revisiting professional practices for the implementation of less car-dependant urban models:** town planning and integrated multi-modal public transport networks must be closely linked around rehabilitated public areas.

More generally speaking, the emergence of an urban contracting authority entrusted with the competence, own resources and the ability to arbitrate between local players is one of the pre-conditions for the successful implementation of more sustainable urban policies.

Air pollution mapping in Marseilles



Source: ATMO PACA

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