



IS THERE A ROAD AHEAD?

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Traffic congestion is diminishing the quality of life in Istanbul. Currently almost 1.8 million automobiles choke its roads. Blessed with graceful natural beauty as well as a rich historical urban fabric, Istanbul faces serious challenges in trying to accommodate an additional 84,000 cars every year. This rapid increase in motor vehicles, more than eight-fold since 1980, has coincided with a dramatic population and economic growth. As a result, Istanbul is now overwhelmed by a flood of people and vehicles, an inadequate road network and a public transport system that has been slow to develop. With new overpasses and an infrastructure that favour the private car, the city struggles with air pollution, the destruction of its natural and cultural heritage and congestion. Although there are only 139 cars per 1,000 inhabitants, the average travel time for motorised trips alone has increased from 41 minutes in 1996 to 49 minutes in 2006. Like many other metropolitan cities in emerging economies, Istanbul thus suffers from high traffic congestion despite a low level of car ownership.

Istanbul's citizens make an average number of 1.74 trips each day. This is up from 1.54 per capita in 1996. What is more interesting is that while the rate of motorised journeys has actually declined from 1 per capita to 0.87, there has been a considerable increase in the share of walking, from 35 per cent to 49.3 per cent in the same period. Buses and minibuses also play a key role in the commuting patterns of Istanbul's residents, comprising the highest share, 40.8 per cent of all daily motorised journeys. Taken together with shuttle buses operated by private companies to transport employees as well as school buses, they form essential and complementary modes of a successful public transport system. Yet, while the overall share of journeys made by public transport has remained at a stable level of 70 per cent over the last two decades, the increase in the share of private cars from

19.3 per cent to 26.3 per cent has caused serious traffic congestion and environmental pollution.

At the end of June 2009, the Ministry of Transportation announced the location of a third bridge over the Bosphorus Strait. This announcement followed the earthquake proofing maintenance work on Fatih Sultan Mehmet Bridge, the second bridge, which exacerbated the city's already congested traffic patterns. Currently, approximately 420,000 vehicles cross the Bosphorus each day on the city's two existing bridges. The logic of the Government is rather simple. Today the two bridges are clogged. Because the city is growing fast and the number of automobiles is growing much faster, a third, even a fourth and fifth bridge are necessary. But this argument ignores a crucial factor in transport planning – the 'induced traffic' which results from changes in land use and activity patterns following road construction. Thus, construction justified as a remedy for congestion only creates congestion in its own right. In short, it is impossible to build one's way out of traffic congestion. Attempts to do so only lead to a continuing cycle of rent-seeking land speculation, lobbying by construction firms, political patronage and a renewed search for 'solutions'.

Public opinion about the third bridge is divided. In Tarabya on the European side and Beykoz on the Anatolian side, two districts which the third bridge could pass through, some residents hope the bridge will help develop their neighbourhood. But not everyone shares this optimism. There are also concerns that the natural environment, specifically the forests – the lungs of the city – and the water reservoirs in the North, will be severely damaged by the third bridge.

Further evidence of how Istanbul's transport policies fail to establish a sustainable low-carbon transport system for the city can be found in the controversy surrounding the Ministry of Transportation's project

to create the Bosphorus Highway Tube Tunnel. This US\$ 1.5 billion two-storey, two-lane, 5.4 kilometre-long tunnel is expected to bring almost 80,000 cars to the historical heart of the city each day. Yet despite calls from transport experts, professional organisations and NGOs, tendering of the project has been completed but neither the tunnel nor the third bridge are included in the Istanbul Metropolitan Municipality's strategic plan for the city.

In Istanbul, urban transport has long been formed by a road-based policy which lacks an overall financial strategy. Instead, major transport projects are developed and funded on an ad hoc basis. This trend to accommodate the increasing number of automobiles through a road network while extending an insufficient rail transit network has put pressure on the financial resources of the city: between 2001 and 2007 alone, the Istanbul Metropolitan Municipality spent 14.8 billion TL (US\$ 9.9 billion) on transport projects.

Although half of the daily trips are made on foot, cycle lanes and pedestrian pathways have been ignored by policymakers. Part of the reason cycle trips represent only 0.05 per cent of the total trips in Istanbul is because of traffic and air pollution, but cyclists in Istanbul also confront flooded and obstructed cycle paths and a lack of adequate bicycle parking. There are rumours about a masterplan to add 1,004 km of cycle lanes but without a clear timeframe for delivery, implementation is doubtful.

Even so, progress is being made to reduce emissions caused by transport. The motor vehicle industry in Turkey has adopted the Motor Vehicle Technical Regulations of the European Union. And over the last decade, the urban rail transit network has expanded and emissions from road traffic have decreased due to an increasing number of vehicles equipped with catalytic converters using unleaded petrol, and taxis using petroleum gas. Istanbul's Metrobus, a bus rapid transit, has decreased the emissions from road traffic as well. The system now carries almost 440,000 passengers a day over 40.4 kilometres of bus lanes separated from the motorway at a speed of 40 km/h. This has reduced in-vehicle travel time by about 50 per cent and increased use of public transport.

Transport greenhouse gas emissions result from a well-known 'three-legged stool': vehicle fuel efficien-

cy, each fuel's lifecycle – how long the greenhouse gas emissions remains in the atmosphere – and how much people drive. Recent studies make it clear that where and how we invest in transport infrastructure make a difference: people drive less in areas with greater transport options and where it's easier to walk. Transport investments that reduce the demand for travel by car benefit the environment as well as the economy. One of the greatest challenges associated with implementing sustainable strategies relates to the need to pay sufficient attention to long-term impacts. Reducing greenhouse gases and improving air quality are likely to be of greater concern for future generations. Yet given their typical four or five year term of office, it is too easy for policymakers to focus on immediate needs and overlook long-term problems. As a result, governments favour solutions achieved through policy measures which represent the supply-side of transport policy rather than the demand-side measures of regulation, information and pricing. Demand management measures are known to be more cost-effective in reducing congestion than infrastructure provision, but are more difficult to implement. It is now widely accepted that no single type of policy will solve our transport problems. We cannot, for example, build sufficient infrastructure to overcome congestion. Instead, a package of solutions implemented in tandem will be more effective than any on their own: for example, combining public transport improvements with parking controls and congestion charging can substantially reduce private car use. As the service level of public transport system improves, it is necessary to implement policy options such as congestion charging and parking policies to discourage car use in city centres.

The Ministry of Transport and the Istanbul Metropolitan Municipality plays a key role in road transport management in Istanbul, yet responsibilities for traffic legislation and its implementation are scattered across more than ten other ministries and authorities. In a study carried out by the First Council of Urban Transport in 2002, 17 local and national authorities were identified to be partially responsible for the planning, investment, operation and management of the city's transport. This fragmentation makes planning and coordination of activities extremely difficult. Mechanisms for establishing more effective coordination and streamlined decision-making between the ministries would go a long way to improv-

ing transport in Istanbul. In order to address issues of regulation, a proposal for new legislation has been prepared to establish one local authority to coordinate transport across Istanbul.

Spatial planning and urban development in the Istanbul Metropolitan area are controlled by a mosaic of decision-making bodies at the supra-national, national, regional and local levels. At the same time, the Istanbul Metropolitan Municipality faces overcrowding, immigration, insufficient policy programmes, illegitimacy, and an inefficient control system. But it seems so clear that decisions for major transportation projects are still made in Ankara regardless the master plans prepared in Istanbul.

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