

TRAFFIC CONGESTION IN CAIRO

AN OVERVIEW OF THE CAUSES AS WELL AS POSSIBLE SOLUTIONS

Since Phase I of the Cairo Traffic Congestion Study is an analysis of the causes of Cairo congestion only as well as the preliminary estimation of economic cost, this overview also provides potential solutions, based on the work of the ongoing Phase II of the Cairo Traffic Congestion Study and previous studies, including the World Bank's Proposed Urban Transport Strategy for Greater Cairo.

1. **Traffic congestion and delays in Cairo are going from bad to worse.** When making a trip during peak hours, one should expect at least double the normal travel time. To reach an important meeting on time, one has to allow for additional time to cope with unexpected but frequent delays resulting from road accidents, security checks, and vehicle breakdowns. Average speeds on major corridors are at least half (15-40km/h) the normally expected speeds (60-80 km/h), and speeds on some local roads in central Cairo are even worse, sometimes making it faster to make short trips on foot.

2. **There are many causes for traffic congestion in Cairo.** Fuel subsidies make gasoline and diesel inexpensive, encouraging more private cars on the road, and even large investments in highways will not keep pace with growing traffic congestion. Cars are either circulating or parked on the streets, thereby blocking the traffic, since there are no or few parking facilities. The metro ridership is high, but the metro coverage is very limited for a city as big as Cairo, and buses are few and old. Minibuses and taxis help transporting a lot of people, but generally need to be safer, cleaner and be able to pick up and drop off passengers more easily. There are few road crossings for pedestrians and sidewalks are often blocked by vendors. There are also few traffic lights and intersections, and U-turns are badly managed and slow traffic substantially. Drivers' behavior and poor enforcement often result in the general disregard of traffic rules.

3. **The economic costs of traffic congestion in Cairo could be as high as 4 percent of GDP yearly.** The economic costs of congestion are beyond travel delays, and they include wasted fuel, health impacts due to poor air quality and accidents, and impacts on economic productivity. When all combined, the yearly economic cost of traffic congestion could reach up to 4% of Egypt's GDP. This means an economic cost to Egypt of up to EGP 50 billion a year (USD 8 billion/year)¹.

4. **Almost all large metropolises of the world pay a heavy price for congestion, but Cairo's costs are excessive.** New York loses about USD 10 billion/year² on delays and wasted fuel alone, and Jakarta USD 5 billion/year³. Cairo's losses are particularly significant given the relative importance of the city to Egypt's overall economy: New York's losses relative to the US GDP are negligible (0.07%) while Jakarta's losses represent about 0.6% of Indonesia's GDP; the relative cost of Cairo's congestion to Egypt's GDP therefore stands high at 4%.

¹ Phase I initially estimated economic cost at about 1.5% of GDP. Phase I analysis was undertaken for a subset of Cairo's road network (excluding estimation for a significant part of the local roads network) and for few economic variables, notably travel delay and excess fuel consumption. Phase II, currently ongoing, is accounting for the additional costs from local roads and other costs, such as health impacts and economic productivity. Phase II estimates, while not final, put the overall yearly economic costs in the 40-50 billion EGP range.

² 2011 Urban Mobility Report, Texas Transportation Institute, 2011.

³ The Jakarta Post, 16 March, 2011, referring to a study by the Jakarta Transportation agency.

5. **World experience in tackling the complex congestion problem in cities is focused primarily on two basic solutions: improving public transport and making the use of private vehicles expensive.** Public transport in most European cities is well developed both in coverage and quality. All modes (metro, tram, buses...) are clean, safe, and affordable, and well integrated. The objective is to allow for *all* categories of travelers (rich and poor, men and women...) to move almost *anywhere* in the city. When public transport is good, the use of private cars during peak hours becomes more of a luxury rather a necessity, and those opting for this luxury have to pay a large price through tolls, parking charges, and congestion charges.

6. **There are solutions that can be implemented quickly in Cairo that could deliver immediate gains⁴.** Improving traffic management and the use of traffic lights at intersections can be a start. Managing parking spaces, introducing parking meters and building parking structures would also be very effective. Providing the proper space for pedestrians' circulation, such as sidewalks and road crossings, will minimize accidents and reduce traffic disruptions. Better regulation of vehicles and drivers, as well as enforcement of traffic and parking rules, would improve driver's behavior and the traffic flows. Finally, creating taxi and micro-buses stops, and organizing the routes and areas served by them, would better serve the travel needs of the public.

7. **They should be accompanied by longer lasting and sustainable solutions that involve an expansion of the public transport system and a revision of transport pricing.** Metros, buses and minibuses are packed in Cairo: this is good because it shows that many people use public transport; this is also bad because it implies there is little supply and not enough capacity in the existing public transport system. Large investments in public transport can be costly and difficult to fund, but if they can reduce congestion costs by a modest percentage the benefits will be very significant. Revising the pricing of transportation, particularly the gradual removal of fuel subsidies and the introduction of parking charges, will both contribute to reducing the use of private vehicle as well as generating the necessary funds to make public transport investments. This combination of 'carrot' (good and affordable public transport) and 'stick' (increased cost for the use of private vehicles) is the most sustainable way forward for reducing traffic congestion and costs in Cairo. In parallel, there should also be a gradual implementation of longer term solutions notably revising land use and allowing for adequate road space and public transport in new urban developments; changing the road usage patterns by allowing for flexible work hours and the increased usage of technology to allow for remote business transactions; and further encouraging pedestrians and other non-motorized means of transportation.

8. **These solutions can only be implemented by dedicated urban transport institutions with sufficient numbers of qualified staff.** Urban transport is a complex subject spanning the competencies of several ministries, governorates, government agencies, as well as public and private transport operators. It also requires a large number of skilled staff with expertise in various fields such as traffic management, public transport, infrastructure management, parking management, and enforcement. World experience shows that cities that were most effective in reducing congestion (London, Paris) have delegated much of urban transport competencies and authority to a single Metropolitan Transport Authority. While the modalities for such authority can be different in various cities, its essential function is to lead the planning, regulation, and execution of key urban transport activities. It also plays a central role in coordinating urban transport policies and activities with the various relevant agencies in the sector in order to have a

⁴ The ongoing phase II of the Cairo Traffic Congestion study estimates the economic benefits of some of these measures and makes recommendations on the most cost effective measures.

coherent, efficient, and integrated urban transport system. Cairo desperately needs such an authority with sufficient resources and power to move the urban transport agenda at the required fast pace to meet Cairo's increasing congestion challenges.