Egypt’s Transportation Sector
An Overview

LYNX Industry Note
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# Appendix

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATA</td>
<td>Alexandria Transport Authority</td>
</tr>
<tr>
<td>BRT</td>
<td>Bus Rapid Transit</td>
</tr>
<tr>
<td>CAPMAS</td>
<td>Central Authority for Public Mobilization and Statistics</td>
</tr>
<tr>
<td>CTA</td>
<td>Cairo Transport Authority</td>
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<td>EBRD</td>
<td>European Bank for Reconstruction and Development</td>
</tr>
<tr>
<td>ENR</td>
<td>Egypt National Railway</td>
</tr>
<tr>
<td>FDB</td>
<td>French Development Bank</td>
</tr>
<tr>
<td>GAPTP</td>
<td>General Authority for Planning Transportation Projects</td>
</tr>
<tr>
<td>GCR</td>
<td>Greater Cairo Region</td>
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<td>GCRTA</td>
<td>Greater Cairo Region Transport Authority</td>
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<tr>
<td>GoE</td>
<td>Government of Egypt</td>
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<td>ITS</td>
<td>Intelligent Traffic System</td>
</tr>
<tr>
<td>IWT</td>
<td>In-land Waterway Transport</td>
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<tr>
<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<tr>
<td>LTRA</td>
<td>Land Transport Regulatory Authority</td>
</tr>
<tr>
<td>MoCA</td>
<td>Ministry of Civil Aviation</td>
</tr>
<tr>
<td>MoF</td>
<td>Ministry of Finance</td>
</tr>
<tr>
<td>MoHUD</td>
<td>Ministry of Housing and Urban Development</td>
</tr>
<tr>
<td>MoI</td>
<td>Ministry of Interior</td>
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<tr>
<td>MoLD</td>
<td>Ministry of Local Development</td>
</tr>
<tr>
<td>MoPBS</td>
<td>Ministry of Public Business Sector</td>
</tr>
<tr>
<td>MoPED</td>
<td>Ministry of Planning and Economic Development</td>
</tr>
<tr>
<td>MoT</td>
<td>Ministry of Transportation</td>
</tr>
<tr>
<td>NERC</td>
<td>National Egyptian Railway Company</td>
</tr>
<tr>
<td>NIB</td>
<td>National Investment Bank</td>
</tr>
<tr>
<td>NUCA</td>
<td>New Urban Communities Authority</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>RTA</td>
<td>River Transport Authority</td>
</tr>
<tr>
<td>SoEs</td>
<td>State-owned Enterprises</td>
</tr>
<tr>
<td>VAT</td>
<td>Value Added Tax</td>
</tr>
<tr>
<td>WBG</td>
<td>World Bank Group</td>
</tr>
</tbody>
</table>
Introduction

• Egypt launched its Medium-Term Revenue Strategy (MTRS) in 2021 with pillars varying across multitudes of initiating legislative foundations, stabilizing macroeconomic position through devaluation and restructuring government spending, and diversifying economic activities through increased public investments.

• The main goals of the vision aim to provide a well-situated environment for economic growth through empowering private sector capacity building in terms of participation and capabilities while attracting foreign investments towards value-added industries.

• The current governmental strategic direction is focused on transforming Egypt’s capabilities towards two main pillars: positioning Egypt as both a global trade hub and a regional energy landmark.

• The strategy is derived from Egypt’s natural gas discoveries during the past decade (2010 – 2020) while empowering the Suez Canal zone and the nation’s Mediterranean and Red Sea coastal lines.

• The GoE has taken serious steps towards stimulating economic growth by improving the state of the infrastructure including expanding the national electricity grid and renovating the road network.
Snapshot

Growth Rate

Unemployment
Snapshot

Income per Capita (EGP) | Income per Capita (USD)
---|---
2014/15: 27.7, 3.78 | 2015/16: 30.07, 3.69
2016/17: 36.14, 2.44 | 2017/18: 45.7, 2.588
2018/19: 53.8, 3.065

GDP per Capita
Access to Global Trade

- The issue of underutilized access to global economy is underlined by a series of tariff and non-tariff barriers leading to elongated periods to market access, overloading ports’ capacity, and delayed periods of logistical handling as a result.

- The challenge also underlines the access of goods and feeding products to the local industries; Egypt remains reliant on heavy trucking as its main utilized mode. The heavy trucking leverages treasury-subsidized diesel fuel; the usage of railway transport has declined sharply over the past 30 years with the in-land waterways transport industry lacking the appropriate infrastructure for handling goods.

- Furthermore, accessibility to transportation and economic centers remains another obstacle for Egypt’s progress; the country injected considerable amounts of investment towards overhauling its national road network.

- A number of mass-transport regional and national rail projects are currently in the pipeline, yet the out-dated utilities of stationing, transportation vehicles, and governing gaps/grey areas between authorities still cast their shadow on the unequal development in regional and governorate terms.
Headline Objectives

Reforming the governing structure of mass transport will provide the required foundation for better fiscal performances for mass transport authorities.

The authorities’ fiscal performance at loss resulted in declining levels of service, aging fleets with frequent maintenance needs, and higher rate of accidents in the railway sector.

Inter-modal freight transport centers target to alleviate ports’ logistical congestions and avail proximity to economic centers beside introducing new container handling technologies to accelerate clearance procedures.

The authorities’ expenditures remain dependent on treasury-funded support through tax-funded usage to cover their operational budgets, leaving a funding gap for vehicles, maintenance, and infrastructural development.

The transformation of public transportation fiscal channels to user-funded schemes based on a series of factors including quality of service, frequency of usage, and multi-modal integration this also includes performing structural assessment of the authorities’ human resources will aid in enhancing the fiscal performance of the governing authorities.

Introducing inter-modal freight transport centers and establishing inter-connection points for public transportation will be critical in integrating the national network.
Headline Objectives

This LYNX Industry Note aims to provide an understanding of the overall context of the transport sector in Egypt by focusing on:

1. Transport Planning
2. Governance
3. Investment Framework
4. Operations & Usage
1 Transport Planning
Introduction

• The planning aspect of transportation projects is divided in accordance to the type of transportation under the mandate of the General Authority for Planning Transportation Projects; the authority is a subsidiary of the Ministry of transportation and is responsible for planning and identifying needed projects and required capacities.

• The GAPTP also collaborates with the General Authority for Urban Planning, the Central Authority for Development, and the New Urban Communities Authority to set planning frameworks for urban developments, new cities, and metropolitan areas.
• The planning stakeholders include the Ministry of Transportation, Ministry of Housing and Urban Development, Ministry of Local Development, Ministry of Interior, Ministry of Planning and Economic Development, and the Ministry of Finance.

• The main authorities involved include the following: GAPTP, National Transportation Institute, National Authority for Roads and Bridges, National Tunnels Authority, Egyptian Company for Metro Operations, Egyptian National Railway Authority, General Authority for River Transport, LTRA, Central Traffic Authority, Municipal Traffic Departments, Reconstruction Research and Studies Agency, NUCA, Governorates, Transportation Directorates (GCR), Roads Depts (governorates), Traffic Engineering Dept – Cairo Governorate, and CTA.

• Nonetheless, The Ministry of Planning is mandated to oversee the planning of medium-term national and regional scale projects in essence; the engagement for planning such projects is synchronized with the annual plans of the Ministry of Transportation and its subsidiaries.
Geographic Structure

• Of the aforementioned administrative structure, the emphasized focus on GCR and Alexandria regions with dedicated transport authority for each region is evident; both regions have their own planning departments in collaboration with the GAPTP to model the transportation mechanisms accordingly.

• The planning process of transportation grids is mainly reliant on the nature of the project itself and the region targeted; the main conditions to determine would be the scale of impact (national/regional/municipal).

- In case of the Greater Cairo Region, formerly, the Greater Cairo Transport Authority was mandated with the procurement, operations, leasing, licensing, and permitting the public transportation busing grid in its respective region. The GCRTA oversees the region’s 311 lines of public buses operations.

- The Authority was recently replaced by the Land Transport Regulatory Authority; the LTRA oversees the licensing and regulation of all land transport modes in Egypt.

- The National Tunnels Authority and the Cairo Metro are the main stakeholders for the planning and management of subway projects in the GCR;
Geographic Structure

• On the other hand, the planning chain of transportation on municipal-scale and in rural regions remains ambiguous at times; The challenges to the aforementioned chain are derived from the following:

  - **Higher rates of live transportation**: Egyptian rural areas have higher rates of live transportation (walking/air bicycles/etc.) as the main method of transportation.

  - **Reliance on informal modes for transportation**: Rural areas also witness high rates of reliance on informal modes for transportation including tuktus (three-wheelers), pick-up trucks, among others.

  - **Lack of formal planning and paved infrastructure**: Rural areas are mostly constructed informally on agricultural lands with unpaved roads in the majority of usage. The actual figures of unpaved roads in Egypt’s rural regions remains unclear. The recent Decent Life initiative aims to reconstruct pavement infrastructure in more than 4,200 villages (58 million people). According to an official governmental statement, 50% of all constructed housing units in urban and rural Egypt are unplanned and built informally. (Prime Minister Mostafa Madbouly, 2021)

• Transport planning processes have been mostly focused on the GCR region for its strategic economic importance. GCR’s economic activities contribute approximately 40% of the nation’s GDP and hosts 22% of Egypt’s population. Yet, the region’s lack of urban growth control and planning implementation led to both an exponential growth in the number of inhabitants of informal settlements and higher-levels of traffic congestions.

• The population density issue is also pegging on the centralization of governmental services in Cairo governorate and the accessibility of public services including hospitals, higher education, and airports.
Headline Planning Objectives

Currently, transport planning framework is focused on the rehabilitation and expansion of infrastructure connecting major economic centers (urban, industrial, and agricultural) with logistical ports (land/air/naval). Most notably, the transport planning, across board, is focused on the following objectives:

1. Enhance National Road Network Capacity and Safety
2. Enhance International Trade Infrastructure Capabilities
3. Diversify the Freight Transport Grid
4. Enhance Fiscal Position of State-owned Enterprises and Public Transit Authorities
1. Enhance National Road Network Capacity and Safety

• The National Road Network Development strategy aims to attract total investments of EGP 175 billion to expand the national freeways network from 23,500 kilometers to 30,500 kilometers across governorates.

• The project has so far concluded the development and establishment of 4,800 kilometers (total investments of EGP 120 billion) with 1,400 kilometers still under construction. The project will also include the development of 800-kilometers international freeway as a part of the Cairo – Cape Town initiative.

• The Central Authority for Traffic Management also inaugurated its Intelligent Traffic System (ITS) several major roads in the GCR region and national expressways.

• The gradual roll-out of the system, beside the introduction of trafficking systems in urban centers, targets enhanced management of traffic congestion, enhancement of the rule of law against traffic violations.

• The project has targeted increasing the number of Nile cross-over corridors to facilitate mobility between the East and West banks of the Nile, the establishment of bridges and tunnels over crossroads and railway crossings, beside the development of inter-city regional roads within the urban centers.
2. Enhance International Trade Infrastructure Capabilities

- The standing ports face a number of issues affecting its growth leading to underutilization of its geographic advantages; the complex policy frameworks on access of goods, materials and technologies severely affect local industries and market capabilities.

- Custom clearance policy frameworks often require an elongated series of governmental approvals for compatibility and market regulation, originally set in place to ensure qualitative monitoring of traded goods.

- The outdated policies, along with port queuing, caused harmful delays to timely access of shipments to the country; both often leading to congestion in warehousing capacities.

- The GoE recently ratified the New Customs Law in a bid towards facilitating the access of goods to the local market through ensuring financial clarity on required dues, centralize and reduce the number of governmental approvals, authorize the establishment of warehousing outside of ports’ premises, among other objectives.

- Most notably, the law will obligate companies to prior-registration of goods through a digital system aiming to reduce the paper-trail of shipments and pre-access queuing. The legal framework also authorized fast-tracking of access based on a number of quality indicators including track-record of compliance and frequency of shipments.

- The challenge, however, remains for the relevant stakeholders in mitigating back-end codes and regulations of governmental approvals. The digitization of paper-trails and requirements will reduce error factors yet the timeframe for prior approvals, depending on the respective regulator of the goods, remains a challenge if not coped with policy amendments and appropriate human resources training.
3. Diversify the Freight Transport Grid

- The GoE announced a number of plans to establish a multimodal freight transport network by integrating dry ports in the freight network through constructing 7 dry ports in the main industrial hubs and promoting railway and in-land waterways transport modes in freight handling and movement.

- The establishment of dry ports aims to alleviate logistical congestions from naval ports. The dry ports are planned to be included within both national railway and road networks while providing logistical handling services.

- The announced plan for dry ports shows strategic placement of the projects in proximity to existing industrial hubs beside several new cities in Nile Delta, Upper Egypt, and Mediterranean Coast.

- The services are targeted to contribute to accelerating the access of goods while reducing the near-full reliance of the local market on heavy-trucking.

- The heavy-trucking industry currently accommodates around 98% of total freight transport in Egypt. The government currently targets to revitalize the role of railway transport through rehabilitating a number of specialized lines (i.e. Abu Tartour),

- Nonetheless, the national heavy-trucking fleet features a lot of pertaining issues; local heavy-trucks remain heavily reliant on solar (low-grade diesel fuel), a heavily-subsidized fuel, imposing pressure on treasury budget.

- Subsidizing solar fuel grants trucks notable cost-saving advantages in comparison with IWT and railway transport; the diesel subsidy is a political necessity as it provides stability to the majority of public transportation vehicles and trucking fleet.

- The reliance on heavy-trucking also poses an environmental threat in contrast with IWT.

- The GoE also revealed plans to revitalize railway transport infrastructure as part of strategy to transition towards multimodal freight transport. The plan revealed includes constructing extensions to the current railway grid to reach economic zones in the Sinai Peninsula and Red Sea ports beside the establishment of the high-speed railway network.

- The plan comes with a set target for railway freight transport to accommodate 40 million tonnes/annum by 2030 with interconnectivity between industrial hubs, dry ports, and naval ports. The plan also includes long-term international extensions to regional markets including Libya, Chad, and Sudan.

- The GoE’s announced plan includes procurement processes for both locomotives and coaches expected to arrive gradually until 2024 beside a recent agreement to localize manufacturing and assembly of train coaches. The plan also includes a number of agreements to introduce electronic signaling systems, double-track essential lines, and renewing stations.
4. Enhance Fiscal Position of State-owned Enterprises and Public Transit Authorities

- While the Ministry of Public Business Sector (MoPBS) launched a reform plan towards restructuring and assessing the financial standing of its subsidiaries (including 8 freight and persons transport companies), the Cairo Transport Authority, the Egyptian National Railway (ENR), are still operating at vulnerable deficits.

- The MoPBS plan aims to eliminate the reliance on treasury in covering annual financial deficits through executing internal restructuring of companies, merging companies of similar mandates/economic activity, or dissolving companies that lack economic feasibility. The plan aims to turn companies into profitability and redirect treasury resources towards expansionary measures and renovating means of production (machinery/vehicles/vessels/etc.).

- MoPBS’ 8 companies, five of which are specialized in freight transport and 3 specialized in regional inter-governorate transport, were recently merged into two separate companies. EG Bus, the new inter-governorate travel body, recently issued a tender for private sector leasing of its operations and management.

- Recently, the GoE proceeded with intra-agency negotiations in order to settle financial dues between authorities and the National Investment Bank to limit the latter’s financial exposure while utilizing authorities’ unused assets.

- The MoT also launched a reform campaign towards renovating the ENR’s fleet and infrastructure while aiming to utilize a recent legislative amendment to the ENR law allowing private sector participation, concession, and operation of railway.
Governance
General Framework

- The governance of the transport sector is mandated under the Ministry of Transportation and its subsidiaries for Maritime Transport, Railway Transport, Land Transport, River Transport, and Tunnel Transport (subway rail) while the Ministry of Civil Aviation is responsible for governing the civil aviation sector and its infrastructure.

- The land transport sector remains the most complex sector with a variety of stakeholders involved depending on the region covered, infrastructure used, and type of operational license obtained.

- Although each sector is governed under the establishing legislative framework of the monitoring body, regulatory gaps still remain with regards to suburban/rural regions and the participation of private sector in a number of sectors.

- For instance, recent legislative amendments to the railway legislative framework in 2018 authorized the participation of private sector in the operational, construction, and concessional aspects of railway activities. A legislative framework for the land transport sector was also introduced through the establishment of the Land Transport Regulatory Authority under law no. 73/2019 which aims to regulate and license land transport modes and activities (persons and freight transport).
Civil Aviation

• The sector is governed by the Ministry of Civil Aviation (MoCA) through the Civil Aviation Authority.

• The Civil Aviation Authority is mandated with licensing operating airlines, authorizing flights and international paths among other mandates.

• The infrastructure of the sector is monitored, licensed and operated by the Egyptian Company for Airports, a subsidiary of the MoCA. The company is, currently, the sole operator of all civil airports in Egypt.

• A number of local airlines also operate both internal, regional, and charter flights in/outbound Egypt. However, the high rates and fees for docking, usage of airports, and generic taxes remain obstacles to the growth of private sector participation in the sector.
River Transport

- The river transport sector is governed by the River Transport Authority (RTA), a subsidiary of the Ministry of Transport. The RTA is mandated with regulating and licensing in-land waterway docks, vessels, monitoring the status, maintenance and infrastructure of in-land waterways.

- The authority is the sole regulator of both persons and freight in-land waterway transport activities with a recently added mandate to promote the freight transport segment.
Railway Transport

• The Railway Transport Sector is governed by the Egyptian National Railways (ENR), a subsidiary of the Ministry of Transport. The ENR is mandated with regulating, licensing, maintaining, constructing and operating the railway sector in Egypt.

• The recent amendments for private sector participation is authorized for railway assets including railway lines, buildings, land-bank, among others upon the approval of the cabinet of ministers.

• The MoT recently signed partnership protocols with 9 local companies to run the operations, maintenance, and management of a number of railway lines.

• The partnerships are expected to include a concession for Bahari (Nile Delta) railway lines to be run by a local company along with an international operator and a concession for Upper Egypt region railway lines to be run by a consortium that includes an international operator.
Land Transport

• The governance structure of the land transport sector remains complex with a number of stakeholders having overlapping mandates over regulatory and licensing authorities.

• The governance of land transport modes depends, first, on the region and type of mode:

  - **Greater Cairo Region/Alexandria governorate:** Both regions’ public buses grids are run by the Greater Cairo Region Transport Authority and the Alexandria Transport Authority. The authorities run their own fleets of public buses beside their mandates to license and issue concessions for private buses to operate bus/mini-bus vehicles.

  - **Other Governorates:** All other governorates license and, in some cases, operate their public buses’ grid through a dedicated roads and transport unit. The unit is responsible for the operating lines, licensing of private operators, and other forms of communal cooperative associations.

  - **Service Project Units:** Service Project units are mandated to license and allocate working lines for operational microbuses in urban and suburban centers. The units are subsidiaries of each respective governorate.

  - **Land Transport Regulatory Authority:** Established under law no. 73/2019, the LTRA is mandated to license and regulate the public and freight transport movement across governorates. The authority’s role is expected to replace governorates’ licensing units for public transportation and both the GCRTA and the ATA.

  - **Role of Traffic Departments – Ministry of Interior:** The respective traffic department of each governorate is responsible for issuing the operational permits for different public and private transport modes beside maintaining periodical quality inspections. The department is also responsible for monitoring the compliance of different vehicles in terms of safety aspects among other conditions.

  - **New Urban Communities Authority:** A subsidiary of the Ministry of Housing and Urban Development, is mandated with the planning and concessional work of new cities and urban communities. NUCA is also mandated with planning the transport modes in/outbound the communities under its supervision and the planning of required/appropriate modes.
3 Investment Framework
Historical Background

• The investment environment of the transport sector in Egypt witnessed gradual stages of progression based on the strategic direction of different regimes towards the sector. The national network is currently progressing with a number of projects aiming to expedite inter-governorate movement of persons and goods.

• Amid shifting economic priorities towards enabling private sector inclusion across board, the GoE initiated private sector participation in the sector through allowing individual-run inter-governorate transportation through 8-seat vehicles in the 1970s. The step was followed afterwards with gradual inclusion of private investments in the public transportation and transport grids through the participation of individual-run vehicles at the urban, regional, and municipal scales. (Namat for Engineering Consultancy, 2018)

• The gradual phasing was also coped with initiating partnerships with different development partners in the sector in establishing mass transport modes and infrastructure in the GCR region.

• Egypt’s agreement with the French Development Bank to fund the Cairo Metro’s 1st line highlighted the role of international development partners in providing a sustainable development platform for the sector.

• Egypt’s cooperation with the Japan International Cooperation Agency (JICA) also enabled the transport and planning authorities to conduct technical and feasibility medium and long-term studies on the vision for the national and regional transport grids.
Historical Background

Transportation Sector – Contribution to GDP Growth; % (y-o-y)
Integration of Private Sector

- The integration of private and development investment in the transport sector would require further legislative, regulatory and structural reforms by the GoE in order to appropriately direct private investment towards the areas of focus. The reforms should identify clear mandates of economic and regulatory authorities that will distinguish between the operational and licensing activities of the authorities’ respective transport specialization.

- Recent amendments (20/2018) and (144/2020) to the Egyptian National Railway (ENR) establishing law no. 152/1980 provided room for the ENR to utilize the authority’s assets and infrastructure through its subsidiaries or in partnership with private sector. The amendments were the initial steps towards allowing private sector players to participate in operating, constructing, leasing, and maintaining of railway activities. The amendments also aim to transform the ENR’s operational role, on the long run, to leasing and regulating body of railway activities.
Role of Public Investments

• More recently, the GoE shifted the direction towards intensively investing in the reform and rehabilitation of national infrastructure projects through multiplying dedicated public investments to the sector.

• The projects were focused directly on rehabilitating the national roadway network beside enhancing road connectivity to economic regions and under-developed rurality.

• The strategy aimed to provide the adequate roadway infrastructure for private and logistical auto-mobility within major urban centers, enhancing regional economic integration between governorates, and ensuring connectivity across regions on the national grid.
Role of Public Investments

Total Transport Investment Injected 2018/19 (EGP Billion)

Relative Investment Needs (USD Billion)
Financial and Economic Feasibility of Projects

- Furthermore, assuring the financial and economic feasibility of transport regimes and projects will also remain essential to enabling of private investment participation in the sector.

- The sector’s fiscal issues derive from lack of operational viability of certain modes (as a result of low-maintenance and aging factors of vehicles and infrastructure), inadequate allocation human resources (leading to overemployment), underutilization of assets, and the continued adoption of tax-funded operational models for transport modes (through direct pricing controls of services or through covering fiscal exposures by treasury and public resources).

- The aforementioned issues remain obstacles to achieving economic feasibility of transport projects for private investment. The GoE’s general sentiment towards inclusion of private sector operators in transport modes will pave the way for increasing public reliance on different mass transport modes, whether for freight or persons transport, if coped with appropriate quality of service alleviation and monitoring measures, expanding infrastructure capacities in terms of stations and integration towards a multi-modal grid model, and appropriate pricing schemes tailored for different income segments.
Transportation Investment Profile

Total Investment Injected 2018/19 (EGP Billion)

Transportation Contribution to GDP Growth
Transportation Investment Profile

• Among other projects, the national roads network project was funded through both treasury and public sources while relying on international and local construction market players ensuring private sector participation in the projects.

• On the other hand, the GoE continues to rely on bilateral funding and expertise in terms of national mass transport development plans. The reliance is derived from the ability of bilateral partners to deliver comprehensive packages that include moderate-cost funding with extensive payment periods. The agreements were directly focused on recent expansions to the Cairo Metro grid, expansion and rehabilitation of the current railway tractors and train-cars fleet, and the introduction of high-speed railway network, urban monorail grid, and light-speed railway train.

• Nonetheless, the GoE still needs to diversify funding and investment channels towards the transport sector in order to meet necessary targets of investment levels required to elevate the state of the transport grid. According to the OECD, Egypt needs to inject approximately USD 240 billion towards its transport infrastructure (roads network, ports, railway, and airports) between 2016 – 2040.

• While Egypt remains well on its way to meet its investment targets for roads investments, the targets for ports, railway, and airports lag behind. The need for investment in the aforementioned infrastructure branches is essential to achieve Egypt’s priorities towards enhanced regional and international trade integration beside enhancing the access-to-market and public services status with both airports and ports.
4 Operations & Usage
Introduction

• Upon the assessment of the various structural challenges and opportunities of the transport sector in Egypt in terms of planning, governance, and investment profile, identifying the main opportunities and challenges of the complex operations of the transport sector in Egypt remains the headline priority.

• Unleashing the growth of the sector through enhancing public sector (both economic and regulatory authorities) capabilities in terms of framing a strategy will provide room for the enablement of private sector participation in the industry.
Overview of Operational Challenges

- The transport sector, which contributes almost 5% of the national Gross Domestic Product (GDP), is facing a number of challenges that are derived from lack of clear-cut governance mandates leading to overlapping mandates between different governing authorities, out-dated legislative frameworks limiting the access of formalized channels of investment and private sector participation.

- Inconsistent streams of governmental funding along with inadequate planning for both human resources and hardware needs were contributing factors towards the current state of public transit in Egypt.

- The public transit grid is currently dominated by informal services, run mostly by individuals, lacking active management and allocation of hardware resources.

- The rise of informal public transport modes was met with regulatory attempts including providing special accommodating regulatory frameworks as the frameworks failed to practice rule of law in combating violations of planned lines.
Market Share of Daily Motorized Trips

**Short Trips (>100 kms)**
- Railway: 7%
- Airway: 0%
- Private Vehicles: 11%
- Buses: 14%
- Taxi (including microbuses): 68%

**Long Trips (<100 kms)**
- Railway: 8%
- Airway: 2%
- Private Vehicles: 24%
- Buses: 27%
- Taxi: 39%
Governmental Strategies

- The mass transit and freight network projects are part of the GoE's strategy to introduce a multi-modal freight transport network; the network aims to facilitate the access of goods to local and international markets through increasing the number of points of entry (maritime/land/air) as a mean to enhance Egypt's integration in international trade. The strategy will also include the extension of current roads and railway grids to reach economic and industrial zones.

- Furthermore, the GoE's strategy to adopt an integrated mass transit network aims to promote public mass-transit usage on urban, regional, and national-scales through establishing various mega-transit centers across governorates. The centers will accommodate access to various transport modes.

- However, in order to ensure the successful implementation of the strategy, the GoE may consider adopting defined-regulatory frameworks for integrating the informal transport sector to the grid.

- The integration should also adopt restrictive measures on operational capabilities of each mode (in terms of capacities, geographic range, quality and safety assurance measures, etc.) as well as incentivized programs to ensure accelerated compliance.

- Both strategies should also aim to integrate and promote the formalization of mass transit operations in rural and low-population regions to ensure equal access to public services and economic activities. The lack of access to public services and economic activities contribute to intra-migration towards urban centers and increasing pressure on overloaded infrastructure. (Namat for Engineering Consultancy, 2018)
Ownership of Motorized Vehicles

Number of Private Vehicles (Thousands)

- 2014: 3,737
- 2015: 4,057
- 2016: 4,299
- 2017: 4,712
- 2018: 4,952
- 2019: 5,238

Number of Taxis - incl. Microbuses (Thousands)

- 2014: 322
- 2015: 324
- 2016: 373
- 2017: 383
- 2018: 376
- 2019: 377
Ownership of Motorized Vehicles

Number of Truktuks (Thousands)

Number of Vehicles Accidents
Ownership of Motorized Vehicles

Number of Buses (Thousands)
- Private Buses
- Public Buses

Number of Motorcycles (Thousands)
Status of the Informal Transport Sector

• Informal sector’s considerable market share (83% of total urban daily trips; WBG, 2018) was cumulated due to the deteriorating state of the public transit services provided by municipalities and local transit authorities. The decline in usage of formal public transit service was a consequence of the declining quality of the service itself with declining number of operational vehicles (buses/mini-buses/trains) which led to overloading the transportation grid.

• Challenges to the public transit grid also include regulatory gaps in suburban and rural regions. The grid is usually licensed rather than regulated through municipal units while GCR and Alexandria regions are, technically, regulated through respective transit authorities (Greater Cairo Region Transport Authority (GCRTA) and Alexandria Transport Authority (ATA). The regulatory gaps are often supplemented with transport communal associations or, in some governorates, limited-quantity fleets run by the municipal unit itself.

• The ripples of the decline in quality of public transit services led to an increase in reliance on unorthodox transport modes, especially in rural and population-dense regions, including tuktuks (three-wheel motorcycles), 8-seat Suzukis (primarily used for transport of goods), beside the usage of pick-up trucks. Usage of such modes impose hazardous threats to public safety, the impact on environment due to the usage of low-grade diesel (solar), beside contributing to high-density traffic locks.

• The GoE has recently adopted measures to curtail the importation and local production of tuktuks in Egypt.
Freight Transport Sector

- On the other hand, freight transport modes, specially railway and river (in-land waterway) freight transport, also face challenges in acquiring considerable market shares due to delays in implementing necessary infrastructural and regulatory amendments.

- Drops in railway and river freight transport market shares led to near complete reliance on heavy trucking (98% of total freight transport market; CAPMAS 2019).

- The reliance on heavy trucking bears an environmental and economic cost due to the usage of diesel fuel beside the underutilization of their operations.

- The delay in developing freight transport infrastructure, in terms of the establishment of dry ports, in-land waterway ports and integrated multi-modal freight transport systems, also contribute to turbulences in access to local and international markets (in/outbound goods) due to on/off-boarding of goods at port of access.

- Nonetheless, the GoE’s announced projects to expand and establish several ports, renovate railway and in-land waterway freight transport, and the establishment of an 8-dryports network in major urban and industrial centers, will contribute extensively to enhancing accessibility to local and international markets while reducing the environmental impact of heavy-trucking.
Freight Transport Sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Road</th>
<th>Railway</th>
<th>Inland Waterways</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>73.7</td>
<td>5</td>
<td>4.3</td>
<td>83</td>
</tr>
<tr>
<td>1992</td>
<td>165.49</td>
<td>9.4</td>
<td>3.2</td>
<td>178.09</td>
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<td>2000</td>
<td>242</td>
<td>11.8</td>
<td>2.1</td>
<td>255.9</td>
</tr>
<tr>
<td>2010</td>
<td>433.3</td>
<td>4.04</td>
<td>2.2</td>
<td>439.54</td>
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Model Share for Egyptian Freight Movement
Operational Grid and Ridership - Cairo Metro

- With total annual passengers of more than 884 million, the Cairo Metro remains one of the most vital public transportation modes in Egypt through its 110-kilometers three lines.

- Currently, the Cairo Metro runs through three lines:

  1. **Helwan – Al Marg Al Gedida 1st line**: Established in 1989, the 1st line transports approximately 1.5 million passengers per day across its 44 kilometers. The line carries 480 trips per day at 79 minutes per trip across 35 stations.

  2. **Shubra El Kheima – Al Moneib 2nd line**: Established in 1996, the 2nd line transports approximately 1 million passengers per day across its 21.6 kilometers. The line carries 664 trips per day at 38 minutes per trip across 20 stations.

  3. **Airport – Imbaba – Cairo 3rd line**: The 3rd line is set to launch across 4 phases. The 1st and 2nd phase have been successfully inaugurated with a capacity of 200,000 passengers per day through 518 trips. The remainder of the line is set to include 15 stations across 17.7 kilometers with a total cost of EGP 28 billion. The line’s 3rd and 4th phases are expected to launch through 3 phases in December 2021, June 2022, and April 2023.
Operational Grid and Ridership - Cairo Metro

Number of Cairo Metro Passengers & Units

Number of Cairo Metro Units - by Line
Expansion Strategy - Cairo Metro

- The Cairo Metro is still planned to add 3 more lines to its network; October – New Cairo 4th line, Nasr City – Al Sahel 5th line, and New Maadi – El Khosous 6th line.

- So far, the GoE announced the start of construction processes for the 4th line in December 2019 and is expected to take 12 years to complete its 2-phase process. The line is expected to cost EGP 70 billion with a total capacity of 2 million daily passengers across 38 stations extending through 42-kilometers.

- The Cairo Metro also recently received 24 new trains to its 1st and 2nd lines fleet while renovating 17 1st line trains in an attempt to maintain the state of their infrastructure.

- The Cairo Metro is expected to be integrated within the planned comprehensive public transportation network in Greater Cairo Region which will include connectivity to the Monorails, Light-Railway Train, and BRT systems.

- The main challenges to the Urban Metro system in Egypt revolves around its financial performance and its sustainability with current pricing schemes. The Cairo Metro company reported net deficit of EGP 2.35 billion in its 2018/19 budget with most of the deficit heading towards development and maintenance expenses.

- The GoE recently announced an operator partnership with RTP (France) for operational and maintenance of the Cairo’s 3rd Metro line. The partnership is the first utilization of recent amendments towards the inclusion of private sector operators in the mass transit grid and will aim to decrease the Cairo Metro Company’s financial deficits.
Ridership & Economic Feasibility - Buses

- Hurdled by complex regulatory and governing structure, the mass transit buses sector operations remain centralized around the Greater Cairo region and Alexandria region under the authority of the GCRTA and ATA, respectively.

- Both authorities have seen declining rates of ridership over the past 10 years due to the increasing density per bus; GCRTA buses recorded average 81 rider/bus (buses of 46 seats) (CAPMAS, 2019). The declining rates of ridership are also derived from insufficient investments in expanding fleets to accommodate population growth in the region as well as the extended urban footprint to include new urban communities in East and West Cairo. Beside the politically-driven pricing subsidy, the CTA operated a financial deficit of EGP 325 million in 2020/21; the authority’s operational human resources remain overstaffed with total workforce of 32,942 employees (an average of approximately 11 employee/bus). The ticketing process also includes a 39% revenue sharing scheme by the authority for each bus (divided equally among the bus’s driver, supervisor, and ticket controller).

- The buses’ grids inaccessibility to suburban and unplanned communities led urban populations to shift towards microbuses, tuktuks, and mini-vans; buses market share of inner-city trips declined to 13.8% of total trips. (Namat, 2018)
Structural Gap - Buses

• The CTA’s mandate also includes licensing and concessional capabilities for private sector operators. Currently, more than 28 private operators have active working fleets of minibuses inside the GC region. However, private operators’ fleets mostly operate shorter operational lines.

• The Land Transport Regulatory Authority, established in 2018, is mandated with planning, regulating, and licensing public and private land transport activities across governorates, replacing the role of both GCRTA and ATA. However, the role of the authority is still overlapping with the operational GCRTA and ATA while the authority is also yet to announce its plans for covering different governorates.
Structural Gap - Buses

Average Number of Passengers/Bus

Average Number of Seats/Bus

Average Passengers/Seat (Inner-City Buses)
Inter-governorate Transportation - Buses

- The state of public buses grid across governorates, except GCR governorates and Alexandria, is reflective of the lack of required licensing and planning bodies for mass transit grids in governorates. The average number of buses in the Nile Delta, Upper Egypt, and Sinai Peninsula is between 15 – 20 vehicles/governorate. The lack of operational capacities is mainly due to the lack of regulatory and operational planning municipal bodies leaving room for informal transportation to take over.

- Inter-governorate buses’ operations reflect centralized focus on Cairo operations; 64% of inter-governorate buses’ fleet are dedicated towards Cairo in/outbound trips. Buses cumulate a market share of 27% of total inter-governorate travel modes.

- Although inter-governorate travel sector includes private sector and individual operators, the majority of operations are conducted through 3 State-owned Enterprises (SoEs); Upper Egypt, West Delta, and East & Central Delta companies. The companies were recently merged to form EG Bus; the merger targeted to enhance the overall financial performance of the three companies through unifying the administrative structure and limit the impact of overstaffing on the company's bottom line. Prior to the merger, the companies had an average staffing ratio of 12 employees/bus with average wage bill expenses at EGP 450,000/bus.
Public Transit Sector - Buses

Average Passenger per Seat (2016/17)
Infrastructural Challenges - Railway

• The Railway ecosystem in Egypt recently witnessed legislative amendments to allow for room of public – private cooperation in restructuring the sector’s different assets of tracks, moving units, buildings, and lines.

• The amendments came on the back of the alarmingly increasing number of railway accidents in recent years; more than 11.9% increase between 2014 – 2019. The accidents usually occur due to the ailing state of the railway infrastructure including informal, unpaved crossings and signals system.

• Furthermore, the ENR’s tractors fleet currently faces numerous operational challenges due to their low viability with 50% of the tractors going out of service while more than 50% of train coaches are 40+ years old. (Minister of Transportation’s statement to Parliament, 2021)

• The network’s signaling system also represents a main turbulence to the network; the signaling system still relies heavily (85% of the system) on mechanical signaling and human factor. The Ministry of Transportation recently announced agreements with Thales and Alstom to renovate the signaling system of the network across a number of phases.
Operational Viability and Financial Performance - Railway

- The ENR’s deteriorating operational viability, mainly due to the lack of appropriate infrastructure and fleet, led to increasing reliance on treasury and NIB facilities to cope with its financial obligations; the ENR reported a deficit of EGP 12 billion in 2020/21.

- The ENR’s financial and operational performance also required restructuring in its human resources structure.

- The ENR currently employs 44,158 employees with a total wage bill of EGP 3.8 billion (the ENR’s total operational revenues are estimated at EGP 4.1 billion)

- The ENR’s decline in quality of service led to decline in its market share of ridership; railway trips for short trips (<100 kilometers) was estimated at 6.6% and 7.5% of total long trips (>100 kilometers).
Ridership and Safety - Railway

Number of Passengers (Millions)

Number of Railway Accidents
### Egypt's Transportation Sector - An Overview

**Fleet and Infrastructure - Railway**

<table>
<thead>
<tr>
<th>Origin</th>
<th>Number of Units</th>
<th>Horsepower</th>
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<tr>
<td>German</td>
<td>342</td>
<td>2475</td>
</tr>
<tr>
<td>Canadian</td>
<td>45</td>
<td>2475</td>
</tr>
<tr>
<td>American</td>
<td>30</td>
<td>1850</td>
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<td>Spanish</td>
<td>30</td>
<td>1200</td>
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<tr>
<td>General Electric</td>
<td>191</td>
<td>4000</td>
</tr>
<tr>
<td>EMD</td>
<td>41</td>
<td>3245</td>
</tr>
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National Railway Fleet - by Origin
Governmental Targets - Railway

Railway Tracks Development Plan to Population Expectations

Railway Fleet Development
Governmental Targets - Railway

Railway Ridership Targets (Million/day)
Infrastructural Challenges - Railway

• The railway network is currently undergoing active renovation through a number of agreements with General Electric, Progress Rail, and an agreement financed by EBRD to procure 260 tractors to support the fleet beside a number of agreements to upgrade and refurbish 272 tractors of the current fleet. The sector also witnessed recent agreements to procure 1300 coaches to expand its 3,500 coaches fleet.

• The Ministry of Transportation also announced the establishment of 8 specialized subsidiaries to handle the operations of railway activities based on the segment and type of service.

• The plan aims to include private sector operators for each division to handle the maintenance, quality assurance, and operations of services provided. The Ministry also announced the launch of the National Egyptian Railway Company (NERC) factory complex in the Suez Canal Economic Zone which is expected to enhance the overall quality and median age of both railway and metro fleets.

• The NERC is expected to produce 150 metro coaches, 150 LRT units, and 125 electric traction units annually with a 30% local component.

• The announced plans are expected to elevate the quality of service provided in the sector on the medium-term upon the completion of procurement processes. However, structural challenges on economic feasibility of railway projects, pending the implementation of nationwide ticketing infrastructure in suburban and rural stations, remain while aiming to provide required cross subsidy pricing schemes towards low-income riders.

• GoE has recently signed an USD 8.2 billion agreement for the establishment of the Ain El Sokhna – New Alamein High Speed Railway project. The project is expected to connect Egypt’s Red Sea coast with the Mediterranean coast with 15 stations on 460 kilometers tracks.

• The project is divided into two portions: civil works with total investments of USD 5.2 billion and USD 3 billion for the moving units and technical infrastructure to be implemented by Siemens. This is set to be financed through a 20-year payment plan that includes a 6-year grace period for payment.

• The project will be inaugurated by 2023. The operations will be run through 34 passenger trains beside 10 tractors for logistical and goods transport.
Conclusions and Policy Recommendations
Amending the Transport Sector Governance and Activating the LTRA Mandate

• To avert the impact of overlapping mandates between regulatory and licensing authorities, the GoE should consider revisiting the governance structure of the sector to include specialized governing bodies for each sector; the reassessment should also aim to distinguish between operational and regulatory bodies to avoid uneven playfield for private sector and individual operators.

• The reassessment should also place an emphasis on governing frameworks of municipal and governorate-scale mass transit grids, outside GCR and Alexandria regions. The frameworks would identify stakeholders’ mandates for urban/suburban/rural planning, licensing, geographic ranging and diversity of modes, and quality of service monitoring.

• The introduction of municipal-level transport regulatory bodies, quality assurance and sustainability monitoring frameworks, and the integration of usage frequency data into transport planning are necessary for the development of the mass transport industry in Egypt.
Promoting Private Sector Participation in the Sector

• The promotion towards private sector participation is essential to the development of the sector on the urban, regional, and national scales.

• Modifying the aforementioned legislative frameworks towards levelling the playfield between operational and regulatory authorities and ensuring economic and financial feasibility of proposed transport projects are key to ensuring active participation of private operators.

• Active participation of the private sector in projects will enhance the competition sentiment of the market leading to enhanced quality of services while reducing governmental obligations.
Integration of Informal Transport Operators

- The integration of informal transport modes is essential towards maintaining the efficiency of developed infrastructure while providing a fair playfield with private and public operators.

- The integration would ensure appropriate allocation of transport modes based on the categorical range and capacity while setting restrictive geographic coverage and pre-planned lines of operation.

- The process would allow also for social and economic benefits to the individual operators through enabling accessibility to social safety nets and access to formal financing channels.
Establishment of a Transport Services Quality Assurance Authority

• Amid the renovation and expansion projects for different modes, maintaining the quality of transport services necessitates the establishment of a monitoring body to enhance the quality of services provided in terms of punctuality, maintained capacities, operational and financial efficiency.

• The establishment of this authority would also contribute to prospective partnerships with private sector operators as to setting Key Performance Indicators (KPIs) on the operator’s operational efficiency while reviewing contractual arrangements.
Switching from Tax-funded to User-funded structures

- Utilization of public resources dedicated to the sector towards infrastructural developments and hardware procurement is key to enhancing the services provided.

- GoE may consider revisiting pricing strategies of public transportation services to ensure the necessary allocation of treasury sources towards developmental funding rather than usage of infrastructure.

- The pricing strategies may also introduce cross subsidy schemes whereby certain services and its sub-categories’ financial surplus would cover the financial exposure of services provided to populations in-need.

- The strategies may also assert certain multiple-ride tickets/subscriptions while integrating the social supply card database to identify special accommodations on need-basis.
Thank You