# Challenges and Opportunities of The New Transport University

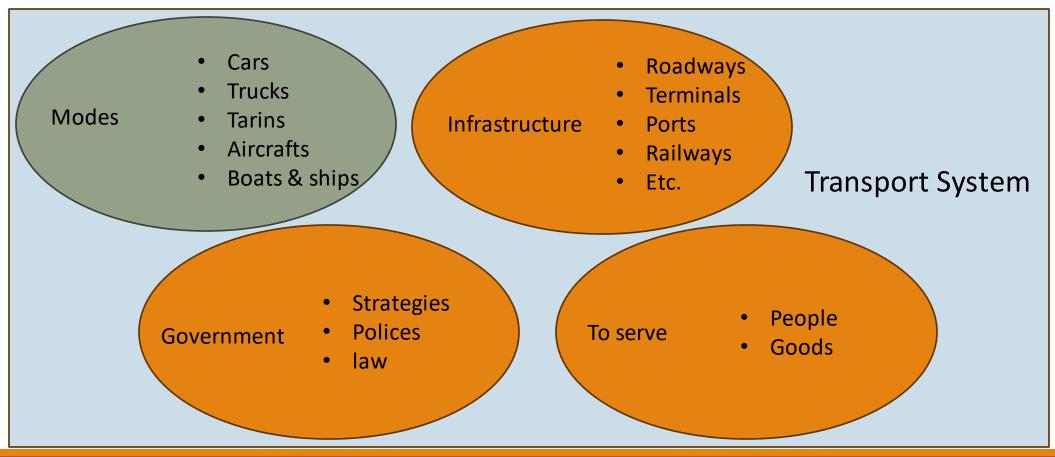
DR. AHMED ELSAYED HASSAN FACULTY OF ENGINEERING,
CAIRO UNIVERSITY

### Agenda

- Introduction
- Current Situation of the Engineering Higher Education
- Transportation Engineering Specialists
- Current Infrastructure Booming
- Transport University Challenges and Opportunities
- Expectation from New Transport University

#### Introduction

 The economic status of any country depend on how well served by the different modes of transportation and how is well designed the transport system



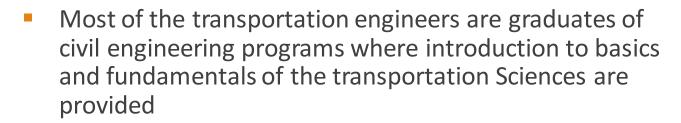
#### Introduction

Need professionals to

Effective Design, build and operate



High quality, Low cost, and safer Transport Facilities



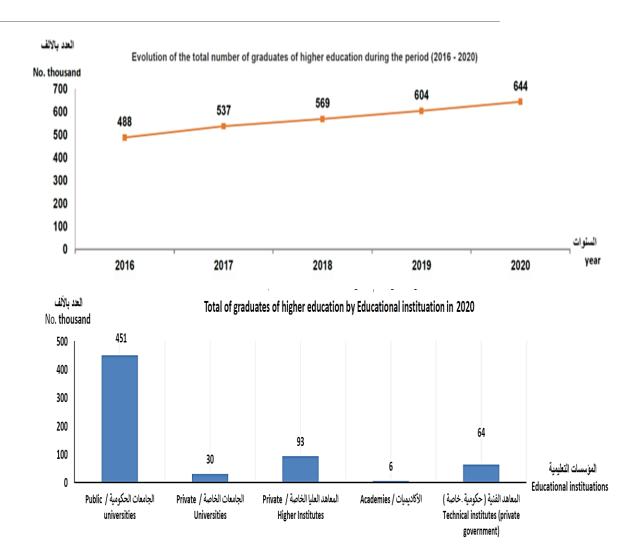
- Civil engineering programs in Egypt are currently construction engineering-oriented programs
- The result is a clear shortage in the number of transportation engineers





### Higher Education Current Situation

- Total number of universities in Egypt is 28 public universities with 544 faculties and 28 private universities with 206 faculties
- Graduates Statistics 644,000 graduates (2020)
- Current Engineers rate is 1 to 8.5 persons
- Size of Faculty Team public university (12,396 faculty member and assistance) achieving a ratio of 1 faculty member and assistance for 24 students
- Universal Professors to Students Rates:
  - 1 to 20
- Universal Engineers rate:
  - 1 to 200



### Transportation Engineering Specialists

- Current Graduate Specialists
  - Construction Engineering
  - Civil Engineer
  - Construction Management Engineer
  - Mechanical Engineer
- Compulsory Specialists
  - > Transport Planner
  - Traffic Engineer
  - Traffic Safety
  - > Transport Economist
  - Seaport Engineer
  - Railway Engineer
  - Construction Management Engineer
  - Environmental Engineer
  - Airport Engineer
  - Bridge / tunnel Engineer
  - Highway Engineer
  - Vehicle Engineer
  - Manufacturing Engineer
- Current Gap

### Infrastructure Booming



- About 247 B EGP in 2022-2023 and about 321 B EGP in 2023-2024 are allocated for Transportation sector related projects as a part of the Infrastructure projects of Egyptian 2030 Vision.
- The projects may include:

#### Road Network

- Tunnels
- Road segments
- Bridges

#### Freight Facilities

- Logistic Centers
- Constructing land ports

### Infrastructure Booming



#### Maritime facilities

- New Ports
- Expanding Current ports (Adding berths, storage areas, etc.)

#### Rail Network (Urban and Regional)

- Rehabilitation projects
- Renovation of Signaling System
- Automation of planning and operation
- New Rail Projects
- Railway Fleet renovation

## **Engineering Job Availability**

### Transport University Challenges and Opportunities

#### Challenges

- Financial Support
- University Resources
- Equipped Labs
- Trained Faculty in all specialties (Capacity Building)
- Attracting Students

#### **Opportunities**

- Prepare suitable candidates to fill the gap
- Potential employment positions
- Adding value to the national economy

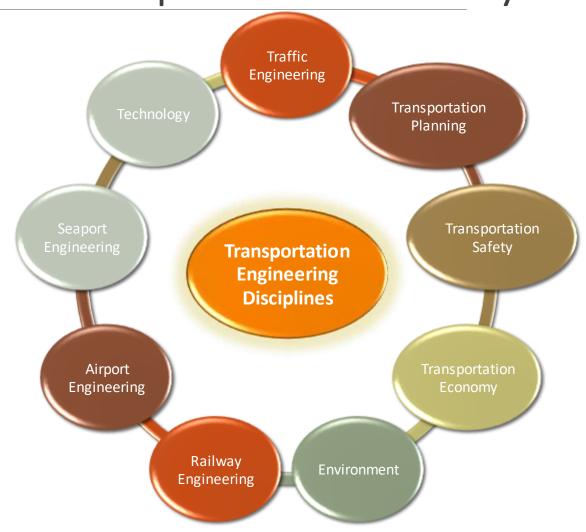
### Expectation from New Transport University

**Transport Specialties** 

Skillful Graduates

Quality Research Work

**Community Services** 



# Thank You