Challenges and Opportunities of The New Transport University

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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.

**Transport System**

**Modes**
- Cars
- Trucks
- Trains
- Aircrafts
- Boats & ships

**Infrastructure**
- Roadways
- Terminals
- Ports
- Railways
- Etc.

**Government**
- Strategies
- Polices
- law

**To serve**
- People
- Goods
Introduction

- Most of the transportation engineers are graduates of civil engineering programs where introduction to basics and fundamentals of the transportation Sciences are provided.
- Civil engineering programs in Egypt are currently construction engineering-oriented programs.
- The result is a clear shortage in the number of transportation engineers.

Need professionals to Effective Design, build and operate High quality, Low cost, and safer Transport Facilities
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