Road Transport in Lebanon: Challenges of obtaining accurate and relevant data

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Road transport in Lebanon: existing conditions

No operating rail services

No public bus system

Off-peak traffic in 2000

Off-peak traffic in 2015

Public transport (lack of data):
- < 30% market share in Greater Beirut (no accurate stats)
- Informal private operator services
  - Low occupancy (11-15 per van, old 2008 stats)
  - Unsafe (high accident risks: conflicting stats)
  - Uncomfortable (no stations, old buses: no data)
  - Unreliable (no routes or schedules: basic maps)

Car transport (data not always accurate):
- > 1.75 million passenger cars in 2017 for 6 million people
- > 5 million daily passenger trips in GBA in 2015 (forecast)
- > 400,000 passenger cars entering GBA daily
- Occupancy rate of 1.2 pass/veh. (25% < world average)
- Old vehicle fleet (71% older than 10 years, 1940-2013)
- Gasoline is the dominant fuel (83.5% of total)

Sector (limited sources of data):
- 2nd biggest emitter of GHG (25% of total GHG’s in 2015)
Transport studies need numerous types of data

**Vehicles and Fuels**
- Vehicle categories (by engine size, class, age...)
- Traffic data (by volume, time, region...)
- Fuel consumption (gasoline, diesel, electric...)

**Infrastructure**
- Refueling networks (by fuel type)
- Roadway networks (capacity, condition...)
- Terminals (capacity, activity rates, modes...)

**Environment**
- Demographics (by region, access to networks...)
- Air quality (by pollutant type, source, region...)
- Sustainability and related indicators

**Costs**
- Vehicle (purchase, maintenance, insurance...)
- Infrastructure (roads, fuels, mass transit...)
- Financial indicators (GDP, CPI...)
Local sources of data

• Government agencies
  o Prime Ministry’s Central Administration of Statistics (*demographic data, economic data, environmental statistics*)
  o Ministry of Interior (*accident statistics, vehicle registration data*)
  o Traffic Management Organization (*traffic data*)
  o Ministry of Public Works and Transport (*public transport data, transport infrastructure data*)
  o Council for Development and Reconstruction (*traffic data, transport infrastructure data*)
  o Ministry of Energy and Water (*fuel consumption data, energy cost data, energy infrastructure data*)
  o Ministry of Finance (*vehicle and road usage fees data, vehicle import data*)
  o Ministry of Environment (*emission data*)
  o Parliament Committee for Public Works, Transport, Energy and Water (*public transport data, emission data*)

• Other agencies
  o Red Cross Lebanon (*accident statistics*)
  o ESCWA Lebanon (*demographic data*)
  o UNDP Lebanon (*energy data, environmental data, cost data*)
  o Private sector: bank research units, engineering & contracting firms, NGO’s... (*various local data*)
  o International sources: World Bank, IBRD, EBRD, IEA, WEC, UNEP... (*various global, regional and local data*)
Access to good transport data (based on experience from conducted studies)

- **Easy**
  - Refueling Infra
  - Financial Indicators
  - Demographics
  - Vehicle Costs
  - Fuel consumption

- **Moderately Difficult**
  - Vehicle categories
  - Traffic data
  - Air Quality
  - Sustainability Indicators

- **Difficult**
  - Roadway Infra
  - Terminals
  - Infra Costs
Lobbying for an integrated national strategy for sustainable transportation in Lebanon

**Infrastructure Development:**
- Developing an inter-modal public transport system
- Building a mass transit system
- Public-private partnerships
- Land-use planning

**Systems Management:**
- Balanced leverage of technical systems and user behaviour
- Incorporation of new vehicle and road network technologies
- Continuous monitoring and assessment of system state and needs
- Use of complementary mechanisms under the “Avoid-Shift-Improve” strategies
- Incentives to overcome cultural challenges towards modifying undesirable driver behaviors

**Administrative Reform:**
- Inter-agency coordination with delineation of authority
- Transparency and accountability
- Process for citizen participation
  - Rapid responsiveness
  - New planning frameworks
- Adequate staffing and expertise
- Political and financial support
Questions:

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