Formalizing Mobility in Dakar: Labor Implications

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II. Fleet renewal and major transit projects

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Dakar mobility patterns

Peninsula of 550 km²

23% of the total population of the country

Inhabitants: 3.5 millions in 2017 - projection of 5 millions in 2030

0.3% of the national territory

50% of the country's urban population

100,000 new inhabitants/year
Dakar mobility patterns

80% of motorized journeys made by public transport
Dakar mobility patterns

- A low motorization rate

<table>
<thead>
<tr>
<th></th>
<th>Motorized vehicles</th>
<th>Personal vehicles</th>
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</thead>
<tbody>
<tr>
<td>Number of vehicles per 1,000 households</td>
<td>256</td>
<td>169</td>
</tr>
<tr>
<td>Number of vehicles per 1,000 individuals</td>
<td>40 (20 in 2000)</td>
<td>25 (16.6 in 2000)</td>
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</tbody>
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- Trips / day: 7.2 millions in 2015
Dakar mobility patterns

Challenges related to mobility

1. The population growth in Dakar (100,000 inhabitants / year) increases transportation needs
2. Peninsular geography creates a “tunnel effect”
3. Heavy dependence on public transport with congestion penalizes accessibility:
   - 80% of motorized transport (1.4 million trips / day)
   - 14km/h of commercial speed
4. Insufficient public transport supply, with low service quality
5. Parking difficulties in downtown and on arterial roads
6. Traffic congestion, accidents, environmental pollution...

To cope with increased flows of population growth, urban transport in Dakar needs to be structured around a collective mass transportation system to improve travel conditions.
Fleet renewal and major transit projects

**Situation before renewal scheme**

- Dominated by craft operators coaches (+65% of market share)
- A public bus company struggling for its subsistence
- A rail public operator with limited area coverage: <1% market share
- Atomization of minibuses operators (more than 1294 operators for 2558 vehicles)
- Anarchic competition
- A classic banking system not suited to fleet renewal needs
- Obsolescence of the fleet (average age of 28 years)
Fleet renewal and major transit projects

Renewal scheme

- 945 operators associated in 14 Economic Interest Groupings (EIG)
- Operators grouped in a mutual company (MECTRANS) for loan warranty and medical insurance for operators and families
- Loans recovery rate > 99%
- Establishment of SENBUS Industry (buses assembly and maintenance)
- 1607 vehicles already renewed in the GMDA
- Extension of the operation since 2015 to 10 other cities (550 minibuses)
Fleet renewal and major transit projects

- **Strengthening the public transport offer and structuring urbanization**
  1. The public transport offer is heavily deficient and of low quality (commercial speed 15 km / h);
  2. Political will to prioritize public transport with several structuring projects undergoing (Regional Express Train, BRT, fleet renewal, ...).

- **Development of sustainable urban transport**
  1. Senegal's commitment to fight against greenhouse gas emissions (BRT registered at COP21);
  2. Availability of donors to support the development of public transport.
Objectives

- Satisfy the strong demand for transport in the best performance conditions
- Promote the use of public transport by a restructured and coherent global network with adequate facilities
- Promote optimal connection and intermodality with future TER and BRT lines
- Ensure better management of intersections and hard traffic points to reduce traffic congestion
Formal transit labor implications

Informal transport organization

**Bus crew**
- Bus driver
- Clients seeker
- Pass collector.

**Triggers**
- Unavailability of transit exploitation data (frequency, bus route passenger tendencies…);
- Improper monitoring of the bus for proper exploitation.
Formal transit labor implications

Mass transportation systems and technology innovation

- Modern ticketing and integrated fare system with controlled access and off-board fare collector;
- New bus driving habits with bus-only lanes system giving right of way;
- High maintenance standards with possibility of acquiring green buses such as electric buses;
- Bus and train monitoring/control center;
- Passenger Information System.
Formal transit labor implications

Modern transport systems advantages

- New/Modern transportation jobs (IT, ticketing, customer service, etc.);
- Formal contracts offered to transit systems staff;
- Job accessibility (faster transit times);
- Reduced on site workers, only the bus driver and occasional fare controllers; More staff for other duties;
- Upgraded worker skills by training;
- Better job revenues and career plans.
Formal transit labor implications

Challenges
• Higher education and training skills needed;
• Traditional jobs not available anymore;
• Potential high cost for education and training;
• New activities performed by computers;
• Less workforce needed for bus operation which might increase unemployment;

Mitigations
• Provide appropriate, accessible and low cost training for modern transportation jobs;
• Anticipate on the demand for modern transportation jobs through sustainable strategic planning.
Thank you for your attention!