

24. Domestic transport policy

Huge investment in Bangladesh's transport infrastructure is needed. Different policies will result in different urban center development but also different energy profiles.

The last decade

In the last decade, usage of trains has remained constant due to the system's capacity. The lack of growth does not reflect lack of demand.

Assumptions of model

The model uses GDP to estimate travel demand and the split between slow, fast and medium transport modes.¹ LMT means Light Motorized Transport and describes motor bikes and auto-rickshaws. IWT describes Inland Water Transport

Levels

Level 1

Focus is on Cars. Large build out of large wide roads required. Bus, IWT and rail held at constant passenger km (no expansion). Remainder of SLOW split between pedal bikes and walking (they play no further role in the model). MEDIUM is split between cars and LMT at 2010 ratio. All of the FAST allocated to aircraft, international and domestic.

Level 2

Focus is on Motorbikes and LMT (light motorized transport). Heavy tax controls or lack of wide roads required. Bus, IWT and rail held at constant passenger km (no expansion). Remainder of SLOW split between bikes and walking at 80% to bikes (better infrastructure). 90% of MEDIUM allocated to LMT and the remainder to cars. All of the FAST allocated to aircraft.

Level 3

Focus is on Buses. Large build out of large wide roads required and development of bus fleet. Rail and IWT and Walking held at constant passenger km (no expansion). Cycling reduced to 50% of 2010 passenger km since buses more convenient. The remainder of SLOW allocated to Bus. This represents a 250% increase in share by 2050. MEDIUM is split between cars and bikes at 2010 ratio. All of the FAST is allocated to aircraft

Level 4

Focus is on Rail. Large expansion and upgrade of railway capacity required, including inter-city links and a Dhaka metro or light rail system. Bus, IWT, Cycling and Walking held at constant passenger km (no expansion). 90% of MEDIUM split between cars and bikes at 2010 ratio. 90% of FAST allocated to Railways. Remainder of SLOW and 10% of MEDIUM (inner city trains) and 10% of FAST (inter-city trains) allocated to Rail.

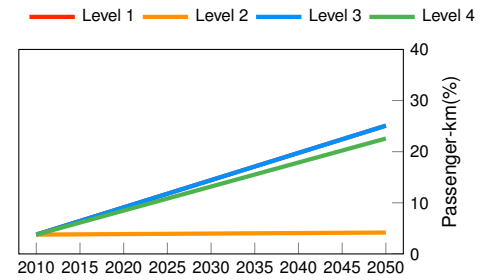


Figure 24.1: Travel demand satisfied by cars



Figure 24.2: Multi modes of traffic, Bangladesh

¹ Andreas Schafer. Papers from the 12th US Frontiers of Engineering

Interaction with other levers

This lever sets the relative proportions of different transport modes. The demand per person is driven largely by the GDP lever. The total energy demand depends on this, the Population lever and the fuel use mix by the combination of the 'Shift to zero emission transport' and the 'Choice of fuel cells or batteries'.