

Addressing transportation challenges

A Mauritian perspective

Intro

Mauritius is about 2,000 square kilometres(800 sq mi) in size, roughly 70 times smaller than Michigan.

Population: 1.2 million

Small, densely populated, with no natural resources.

Economy: Since its independence from Britain in 1968, the country has developed from a low-income, agriculture-based economy to an upper middle-income diversified economy, based on tourism, textiles, sugar and financial services.



Changes in the use of land

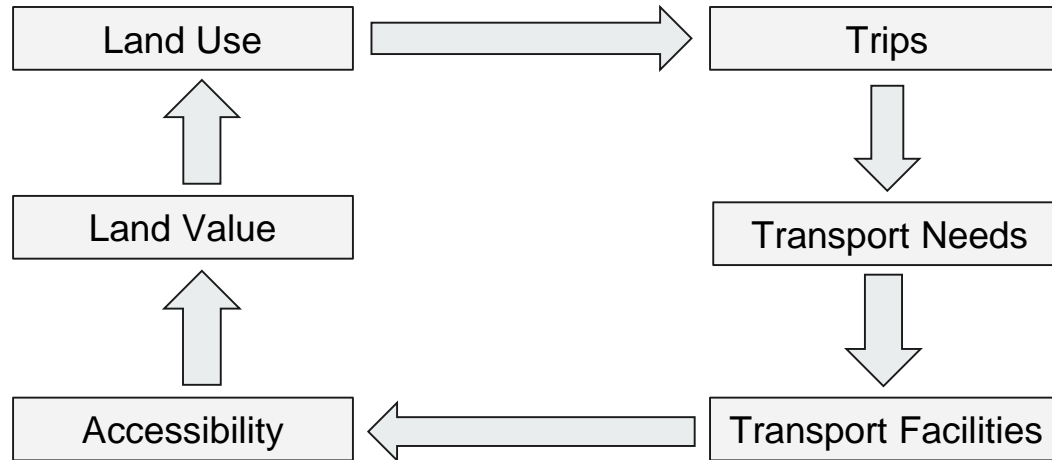
Conversion of sugar plantations into housing plots
and other developments

Demand from the tourism sector for hotel schemes on and
around the environmentally sensitive coastlines

Demand from hi-tech and financial services for new
spacious work sites in greenfield areas adjoining
existing urban areas



Land use and transport interaction



Car dependent society

Over the years, developments have focused almost entirely on provision for private motor vehicles with little attention to effective integration with other modes.

There has also been a deterioration in service quality of public transport.

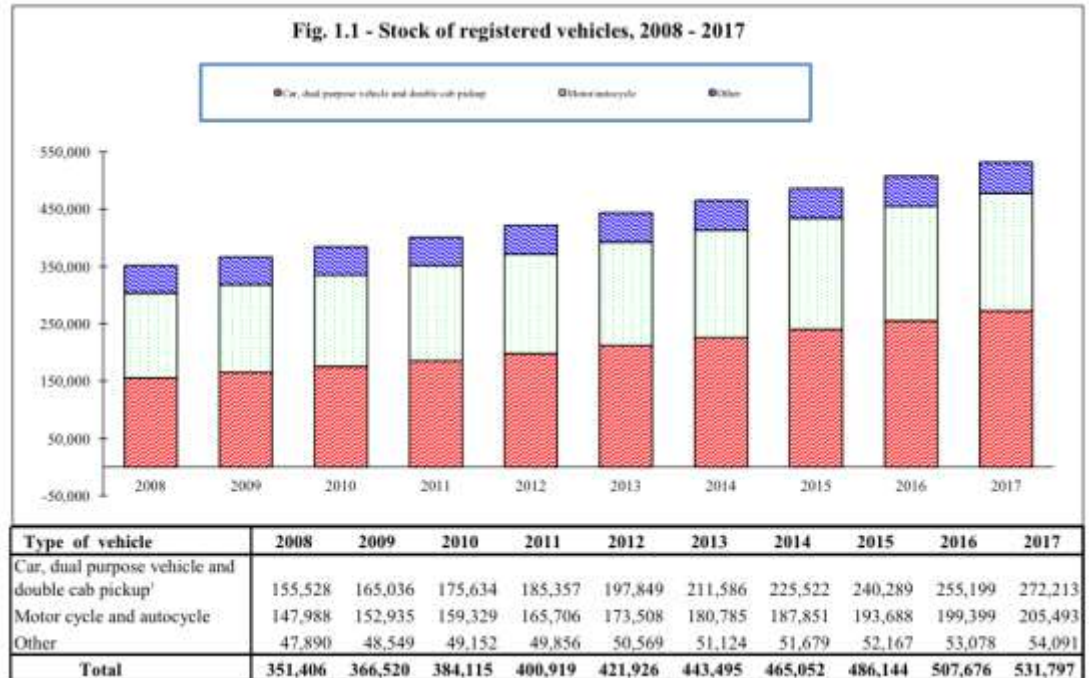


Vehicle ownership

The number of cars per 1000 population was 76 in 2001, 133 in 2010 and 223 in 2018.

The number of registered vehicles has been growing at a rate of 4.5% yearly.

Nearly half of the fleet are Powered Two Wheelers

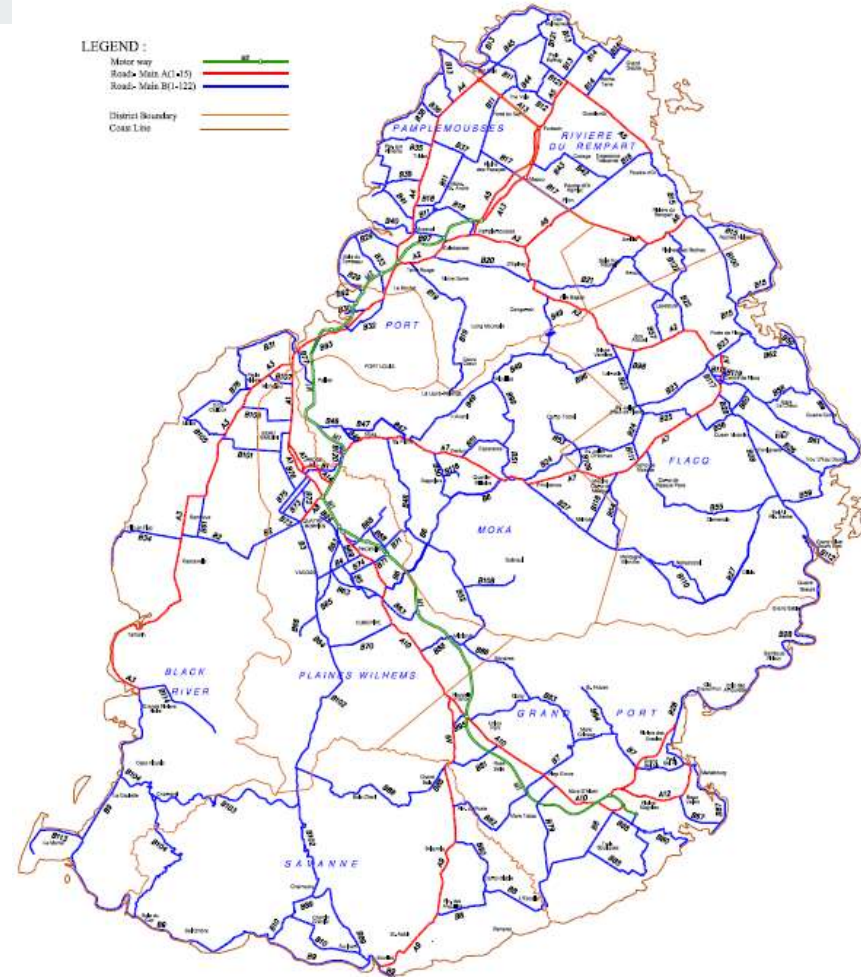


Road Network

Total length = about 2000 km

Traffic and travel demand is rising considerably faster than road space.

The most economically and environmentally feasible road alignments have already been taken up, making new road construction very costly and objectionable.



Congestion and road crashes

Congestion due to increasing car use, particularly during peak times and for journey to work, has been estimated to cost the economy around Rs 4 billion (approx. 1% of GDP) yearly.

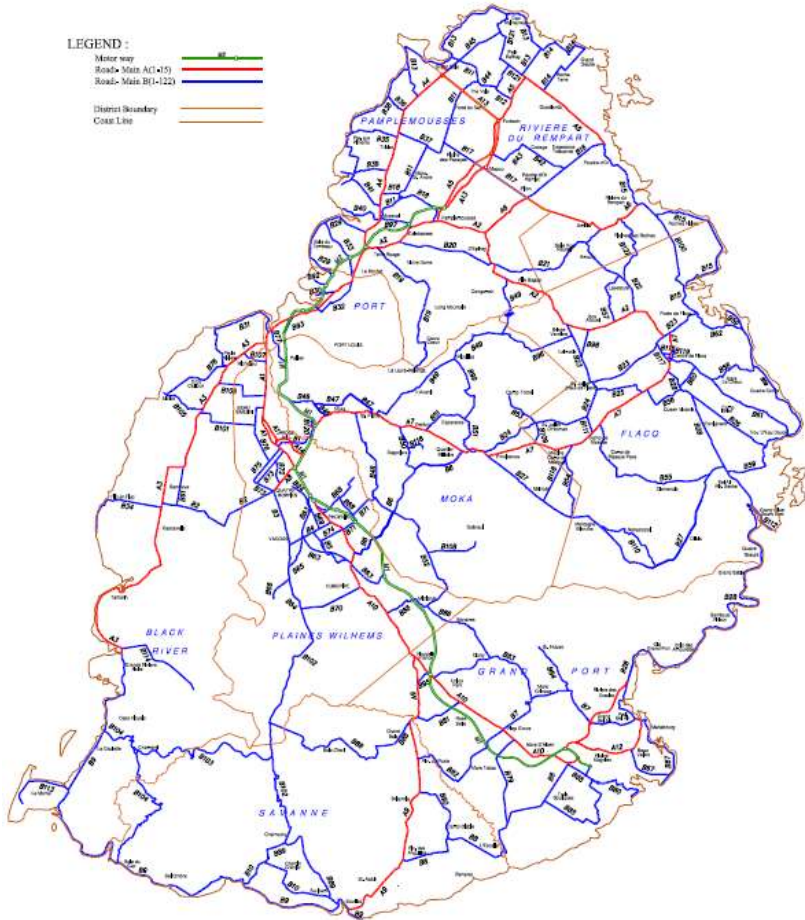
About 150 people are killed every year, hundreds are seriously injured. With an average of 10-12 fatalities per 100,000 inhabitants, Mauritius has the best safety record on the African continent, but Government aims to reduce the fatality rate to 3-4 fatalities per 100,000 inhabitants within the next decade.



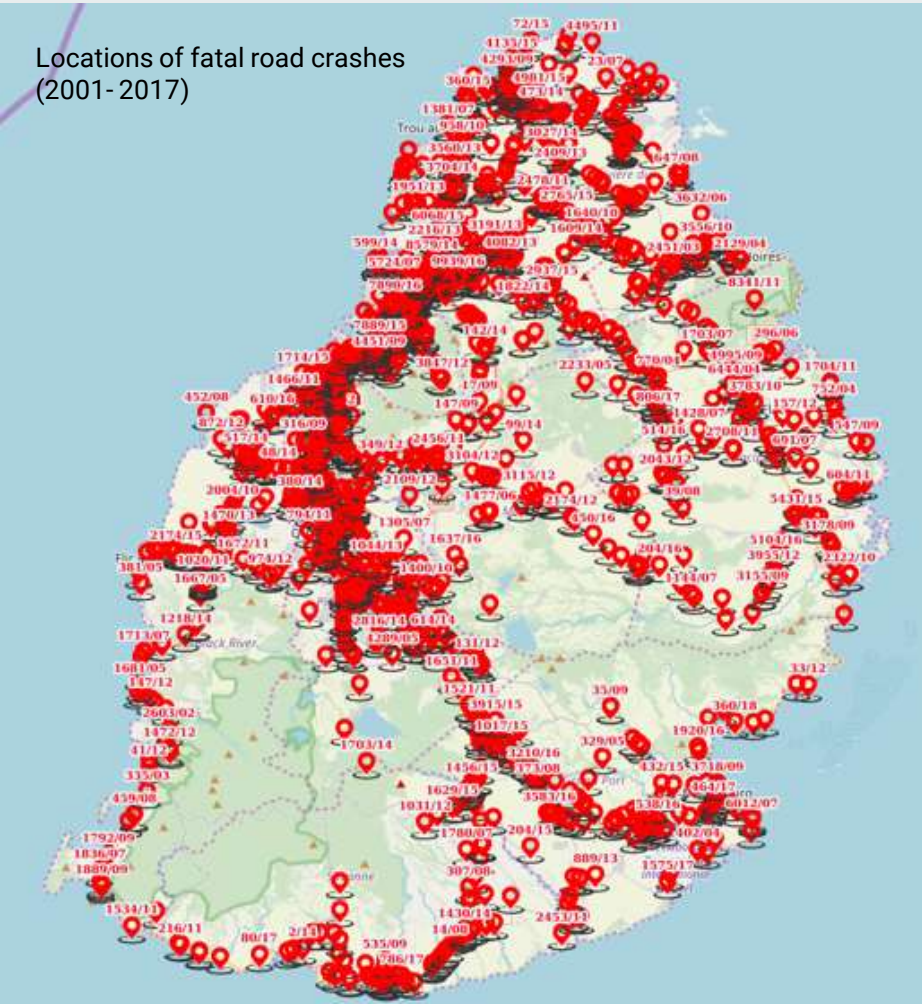
ROAD NETWORK OF MAURITIUS

LEGEND :

- Minor way 
- Road+Main AC(+5) 
- Road+Main B(+122) 
- District Boundary 
- Coast Line 



Locations of fatal road crashes (2001-2017)



Rising air pollution

To meet the obligations of the under the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, Mauritius will increasingly be concerned with policies, strategies and programmes to curb down these CHG emissions.



Addressing the transportation challenges

1. Massive investment in Light Rail Transit (LRT)

“As part of Government’s plan for urban and rural regeneration, the Metro Express will totally redesign towns, create new growth poles around the terminals, drastically reduce the commuting time for citizens, raise productivity, eliminate the inconvenience of traffic congestion, save on petroleum import bills and significantly cut down pollution.” (Prime Minister of Mauritius, 2017)



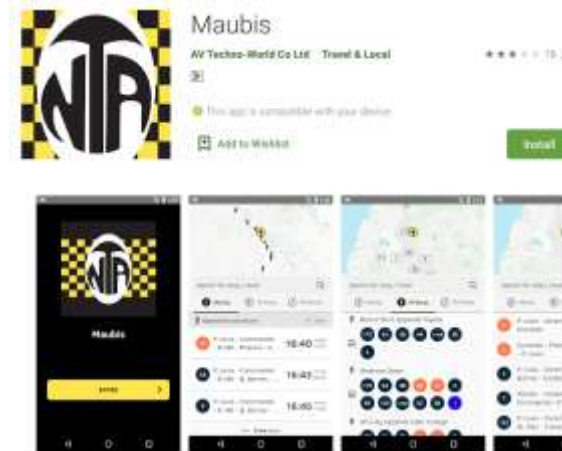
The first phase of the Metro Express project started commercial operation in January 2020.

2. Road Capacity expansion



3. Advanced Traveller Information System ATIS

GPS Tracking System in buses provide passengers with reliable information about specific bus routes and bus schedules. Delivery of ATIS is via a mobile phone app and digital boards installed at bus shelters



4. Extensive use of speed cameras to maximise road safety

Use of 4000 cameras throughout the roads network to detect traffic violations, including speeding.



5. Coordination and control of traffic signals

From fixed timing systems to real time adaptive traffic control systems: A central computer system monitors a series of intersections, using data from traffic sensors, to minimize the sum of the average queues and number of vehicle stops.



Legal system



The legal system derives from British common law and the French civil law.

The Constitution of Mauritius established the separation of powers between the legislature, the executive and the judiciary.

Mauritius has a single-structured judicial system consisting of two tiers, the Supreme Court and subordinate courts.

Most of the traffic laws in Mauritius have a strong relationship with the British traffic laws.

Emerging Issues

Proliferation of electric scooters



Because of the inherent safety risk, the Road Traffic Act has been recently modified so that electric scooter riders share the same rights and duties of the road as motorcyclists.



Thanks!

