"Understanding challenges and priorities for smart transport policies and strategies with transport data in Fiji"
Fiji: Country Context

332 islands in Fiji; approximately 33% inhabited

Total Population
- 49% Female
- 51% Male

Population: 884,887

Modes of Transport
- Land
- Maritime
- Air

Source: Fiji Bureau Statistics
Land Transport

- The regulatory authority for land transport in Fiji.
- Operates under the Land Transport Act 1998

- The top three trading partners in vehicle imports are Japan, Korea, and Thailand
- More than 80% of registered vehicles are Internal Combustion Engine Vehicles (ICEVs)
- Due to tax incentives in 2014 there is rise in Adoption of Plug-in Hybrid Vehicles (PHEVs)

Data on registered vehicles indicate that more than 70% are private owned.
Maritime Transport

• The regulatory authority for maritime transport in Fiji.
• Operates under the Maritime Safety Authority Act 2009 and the Maritime Transport Act 2013
• In addition, the authority's responsibility to ensure commitment to the International Maritime Organization

- Over 3000 registered vessels ranging from pleasure crafts to cargo and passenger vessels
- Additional to local vessel operators that provide service between maritime islands, Government has fleet of 12 vessels that facilitates transportation and infrastructure development in maritime islands
Fiji’s Road Network - Infrastructure

Figure 1 - FRA Road Network on all of Fiji’s Islands

<table>
<thead>
<tr>
<th>Division</th>
<th>Roads (Kms)</th>
<th>Bridges</th>
<th>Jetties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Eastern</td>
<td>675</td>
<td>1,681</td>
<td>2356</td>
</tr>
<tr>
<td>Western</td>
<td>677</td>
<td>2,406</td>
<td>3,083</td>
</tr>
<tr>
<td>Northern</td>
<td>356</td>
<td>1,730</td>
<td>2,086</td>
</tr>
<tr>
<td>Total Country</td>
<td>1,707</td>
<td>5,818</td>
<td>7,525</td>
</tr>
</tbody>
</table>

Source: Fiji Roads Authority 2017/2018 Annual Report
GUIDING PRINCIPLES
GUIDING PRINCIPLES

2013 Constitution of the Republic of Fiji

The 2013 Constitution of the Republic of Fiji includes in Chapter 2, Bill of Rights:

“Right to reasonable access to transportation

34.(1) The State must take reasonable measures within its available resources to achieve the progressive realisation of the right of every person to have reasonable access to transportation.

(2) In applying any right under this section, if the State claims that it does not have the resources to implement the right, it is the responsibility of the State to show that the resources are not available.

Rights of persons with disabilities

42.(1) A person with any disability has the right—

(a) to reasonable access to all places, public transport and information;”
**GUIDING PRINCIPLES**

Published in 2017

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**Goal: Access to transportation through an efficient and sustainable transport network.**

<table>
<thead>
<tr>
<th>POLICIES</th>
<th>STRATEGIES</th>
</tr>
</thead>
</table>
| Ensure safe, efficient (including reducing traffic congestion), and affordable transportation services. | • Continue implementation of actions under the Fiji Decade of Action for Road Safety 2011-2020 National Action Plan.  
• Introduce effective measures to reduce the number of road accidents and deaths.  
• Encourage the development of a national road vehicle fleet that is well matched to transport demand, as well as to the road network and if necessary regulate the composition of the national vehicle fleet where there is incompatibility with the road infrastructure, excessive environmental disturbance, unacceptable safety risk or the need to encourage long-term change in transport modes. Feasibility studies to be undertaken to: (i) explore the viability of implementing public transport network design for an efficient and equitable public transport system; (ii) introducing peak period public transport zoning for high demand corridors; (iii) proper vehicle de-registration and scrapping of vehicles to maintain national fleet composition at manageable levels; and (iv) encouraging car-pooling.  
• Improve driver education, licensing, testing and enforcement through: |
“As the central goal of this LEDS, Fiji aims to reach net zero carbon emissions by 2050 across all sectors of its economy”

For land transport:
- A national electric mobility strategy;
- Transition to hybrid-electric and electric vehicles;
- Promotion of public transport and non-motorize transport systems.

For maritime transport:
- A national action plan for decarbonisation of maritime transport;
- Transition from 2- to 4-stroke engines; and
- Revitalisation of traditional sailing culture and development of low carbon vessels.
GUIDING PRINCIPLES

CHAPTER 1:
MARITIME TRANSPORT POLICY

GUIDING PRINCIPLES

CHAPTER 2:
LAND TRANSPORT POLICY

Published in 2015
CURRENT ITS IN FIJI

E-ticketing System

Traffic Signal Control System

Speed Cameras

Automatic Number Plate Recognition

Benefit of ITS in Fiji

- Generate revenue
- Reduce road accident
- Reduce congestion
Through the NIPA (National IT Promotion Agency) and AiVis Global and Dongbu Engineering, there was a pre-feasibility study done on Intelligent Transport System done in Suva Fiji in 2019.

There were consultations done with local agencies and workshop for the final report of the pre-feasibility study.

However, due to COVID-19 the project could not continue as planned.

PROPOSED PROJECT SCHEDULE
## PROJECT SCOPE OF WORK

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Fiji ITS Business Scope of Work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Targeted System</strong></td>
<td></td>
</tr>
<tr>
<td>Integrated Traffic</td>
<td></td>
</tr>
<tr>
<td>Control Center</td>
<td></td>
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<tr>
<td>Advanced Signal</td>
<td></td>
</tr>
<tr>
<td>Control System</td>
<td></td>
</tr>
<tr>
<td>Traffic Management</td>
<td></td>
</tr>
<tr>
<td>System</td>
<td></td>
</tr>
<tr>
<td><strong>Major Activities and Business Contents</strong></td>
<td></td>
</tr>
<tr>
<td>Status and Technology</td>
<td>Establishment of business promotion plan such as construction schedule and organization</td>
</tr>
<tr>
<td>Technology Analysis</td>
<td>Invited training, local education, and technology transfer plan</td>
</tr>
<tr>
<td></td>
<td>Analysis of expected effect and prospect</td>
</tr>
<tr>
<td>Case Analysis and</td>
<td>Economic Feasibility</td>
</tr>
<tr>
<td>Improvement Model</td>
<td>Establishment of business promotion plan such as construction</td>
</tr>
<tr>
<td>Establishment</td>
<td>schedule and organization</td>
</tr>
<tr>
<td></td>
<td>Budget required, funding plan, benefit estimation, economic analysis, etc.</td>
</tr>
<tr>
<td>Implementatio</td>
<td>Expected Effect and Risk Response</td>
</tr>
<tr>
<td>n plan</td>
<td>Establish future plans such as expected effects and risk management measures</td>
</tr>
<tr>
<td></td>
<td>Analysis of business conditions, risk factors, and financing plans</td>
</tr>
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<td></td>
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</tbody>
</table>
CHALLENGES

- Existing policies are there to set guidelines for respective actors to work on and try to meet the targets.
- Data is there, but sharing data is the problem. Private sectors limit their data sharing.
- Budget constraint to adopt new technology.
CONSIDERATIONS

Continuation of Project as per the Pre-Feasibility Study

Technical Assistance on Capacity Building and Infrastructure Upgrade of Transport system in Fiji

Due to Limited resources Financial Assistance is required to push ITS innovation and systems in Fiji
THANK YOU