

Solomon Islands

Green Roads Profile

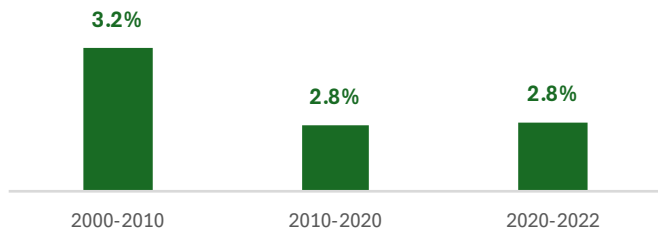
General

Road length (2022)
3,537 kilometers

Subregion
(1) **Pacific**

Income class
Low and lower middle income

Average annual growth rate of road length



Population (2024)
(1) **756.7 thousand**

Land area
28 thousand sqkm (2,3)

Urban population
26%

Rural population
74% (2)

Gross domestic product (GDP PPP, 2022)
1.92 billion USD

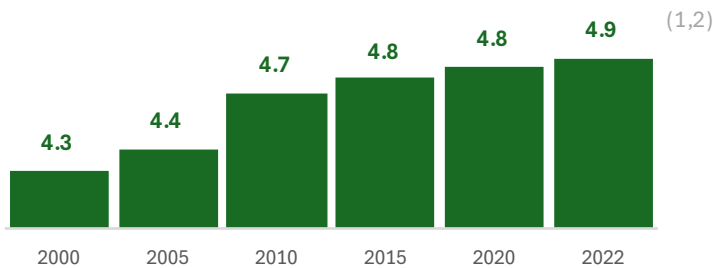
GDP per capita (PPP, 2022)
2,655 USD (2,3)

Solomon Islands's road network is comprised of 0.0% motorways, highways, and primary roads and 100.0% secondary roads, local roads, and other roads

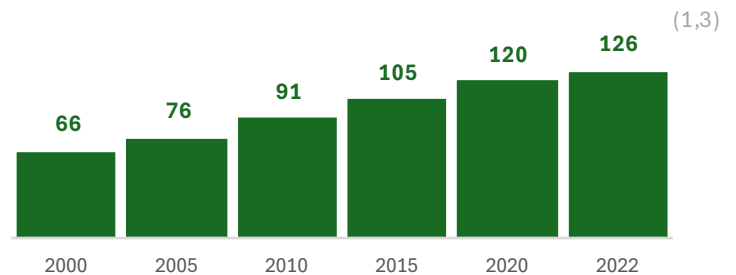
Road infrastructure availability (2022)
4.9 kilometers per thousand population

Road infrastructure density (2022)
(1,2) **126 meters per square kilometer** (1,3)

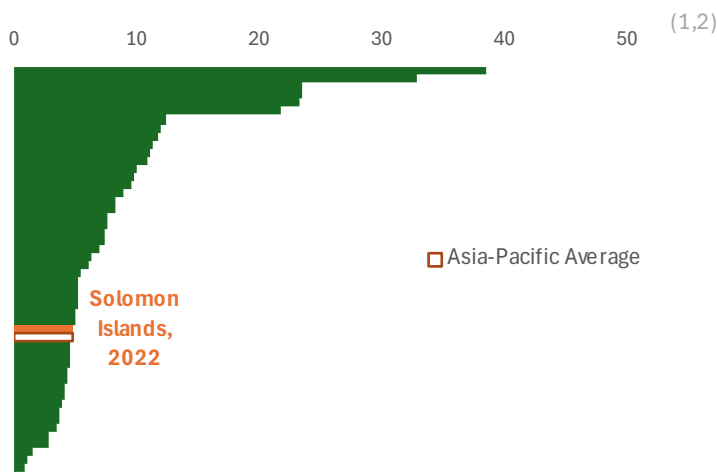
Road infrastructure availability trend, kilometers per thousand population



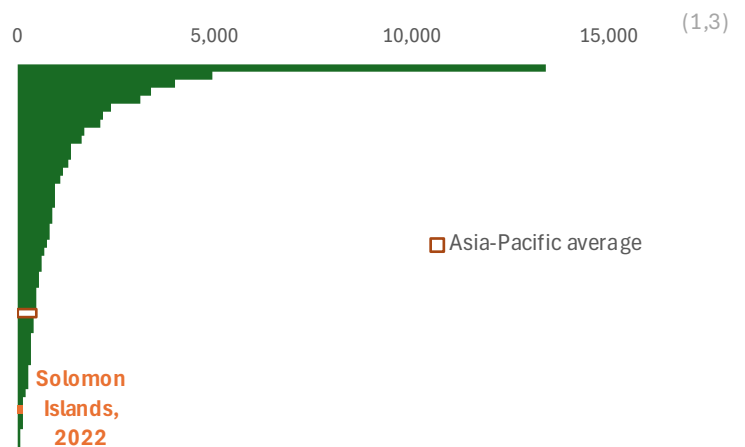
Road infrastructure density trend, meters per thousand population



Road infrastructure availability in Asia-Pacific, kilometers per thousand population



Road infrastructure density in Asia-Pacific, meters per square kilometer



Road vehicles (2023)
n.d.

Public-private partnership investments in road sector, cumulative million USD
(1)

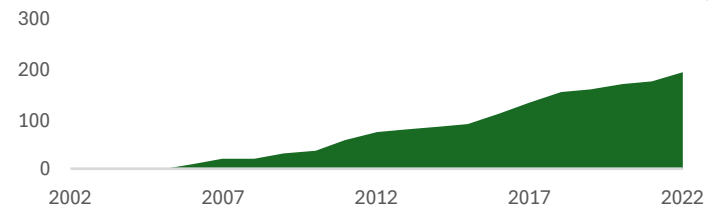
Share of vehicles by type

Share of road in total public-private partnership investments

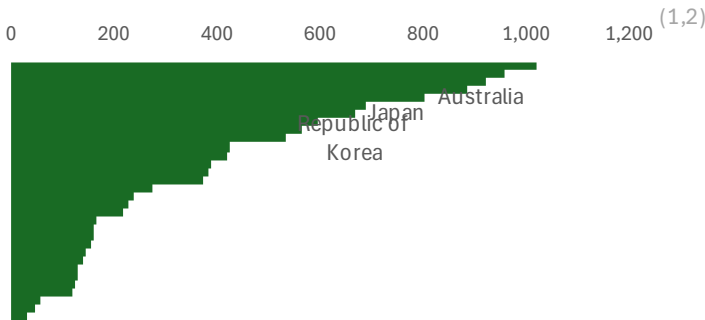
Motorization rate (2023)
n.d.

Official development assistance in road sector, cumulative million USD
(1,2)

Motorization rate in Asia-Pacific, vehicles per thousand population

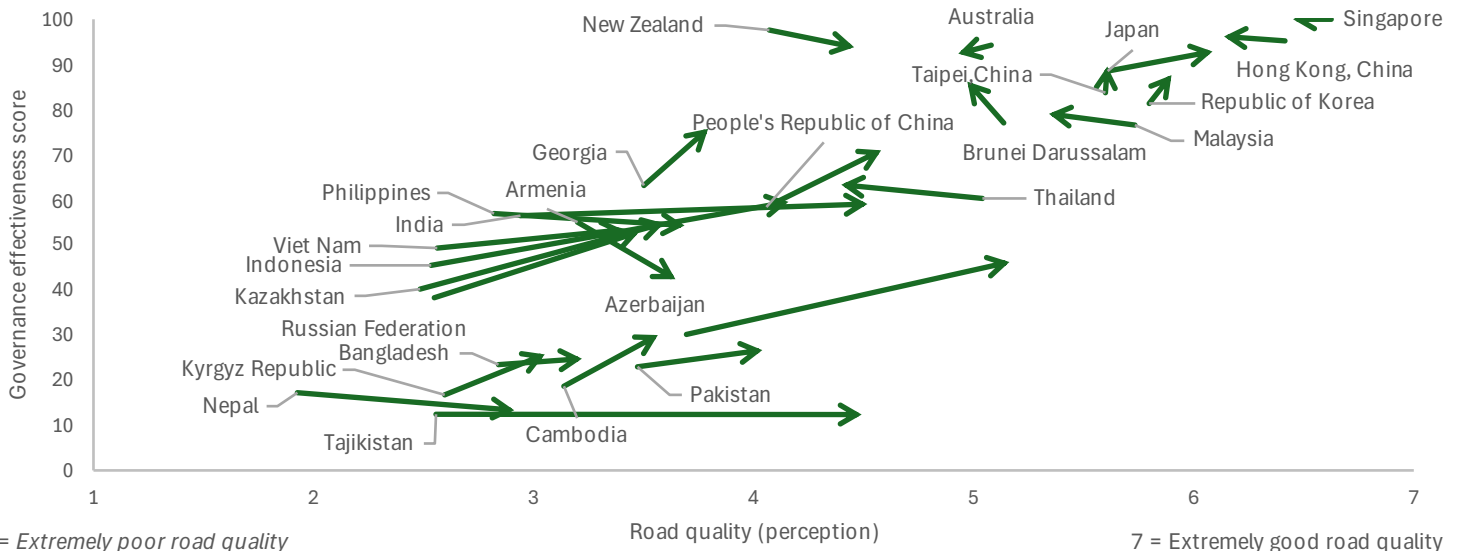


Share of road in total official development assistance



Road vehicles include 2- and 3-wheelers, LDVs, buses and other informal public transport, trucks, and other unclassified types

Road quality (perception) vs. governance effectiveness score (2009-2019)



1 = Extremely poor road quality

7 = Extremely good road quality

Developed with the support of:



Quality of Life and Fostering Inclusive Growth

Rural access index (2023)
52%

(6)

Based on 2015 estimates, only 12% of the population could reach the nearest city in 30 minutes, another 3% could reach in 1 hour, and another 6% could reach only after 3 hours.

Rural population without access to all-season roads (2023)
0.24 million

(2,6)

Logistics performance index score (2023)

2.8/5

(10)

National street network disconnectedness index

(7)

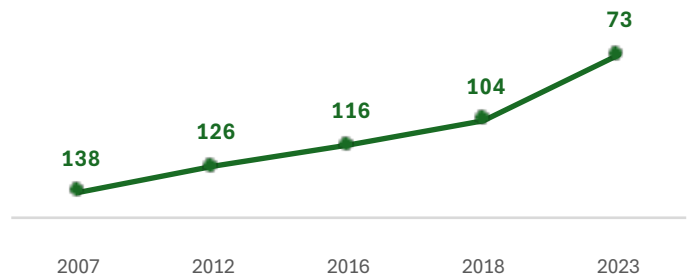
| Infrastructure score

2.6/5

(10)

Logistics performance index ranking trend

(10)



Road crash fatalities (2019)
111 deaths

(8)

Road crash fatality rate per 100 thousand population

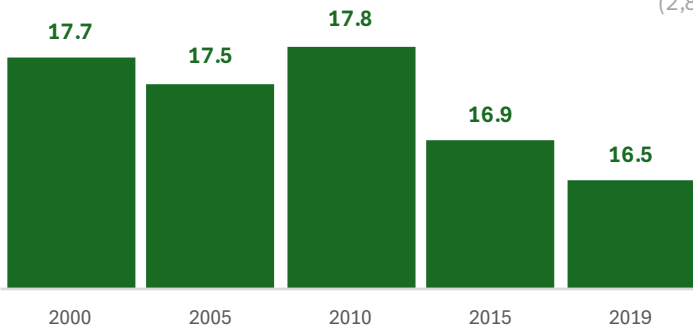
(2,8)

Percent of firms choosing transportation as their biggest obstacle -

Manufacturing

n.d.

(11)



Asia-Pacific average is 15.7 fatalities per 100 thousand population

Percent of respondents answering high/very high - Level of Fees and Charges on Road transport (2007)

100.0%

(11)

Level of fees and charges for less than full truck loads are considered

Mean speed in Asia-Pacific, kilometers per hour (2022)

0 20 40 60 80 100 120 (9)

Mean speed (2022)
n.d.

(9)



Employment in transport sector (2022)

11.4 thousand employees

Share of transport sector in total employment (2022)

(12) **3.1%**

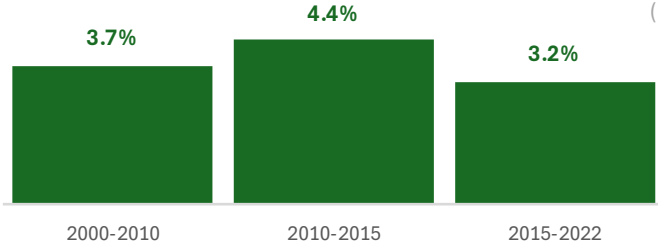
(12)

Average annual growth rate of transport sector employment

(12) Share of females in total transport sector employment (2022)

(12) **7.7%**

(12)

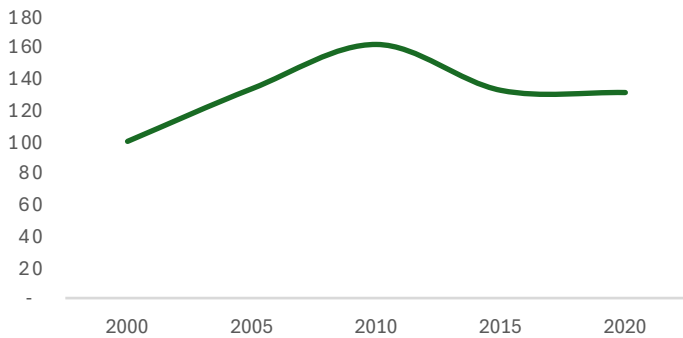


Decarbonization

Road transport energy consumption trend

Assuming 2000 value as base (100)

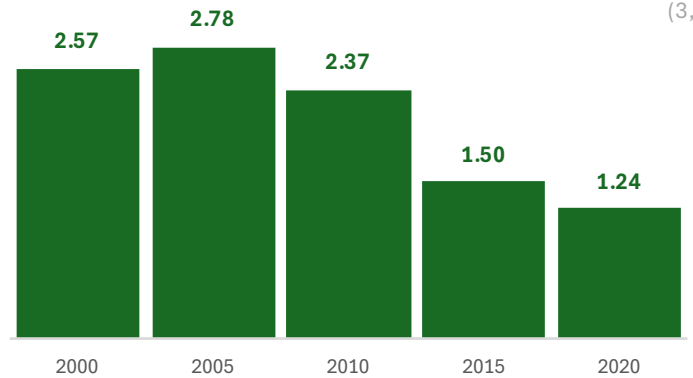
(13) **85% of Solomon Islands's transport energy consumption is in the road sector.**



Between 2000-2010, Solomon Islands's road transport energy consumption grew 4.9% annually. Between 2010-2020, road transport energy consumption contracted -2.1% annually.

Road transport energy intensity with GDP, TJ per USD (PPP)

(3,13)



Asia-Pacific average is 0.4 MJ per USD in 2020

Grid emission factor (2022)

727.3 gCO2 per kWh

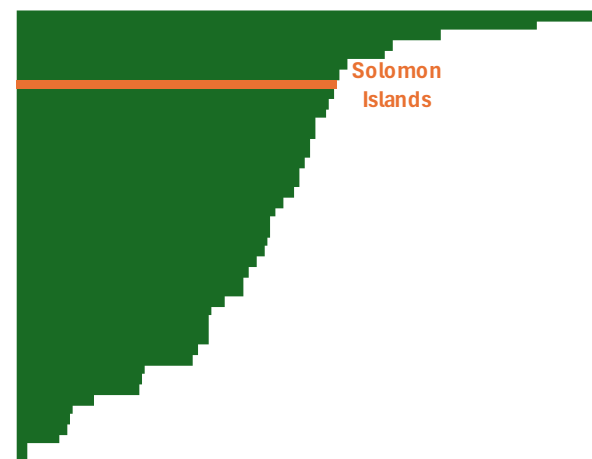
Grid emission factors in Asia-Pacific, gCO2 per kWh

(14) 0 200 400 600 800 1000 1200 1400 (14)

Grid emission factor trend, gCO2 per kWh

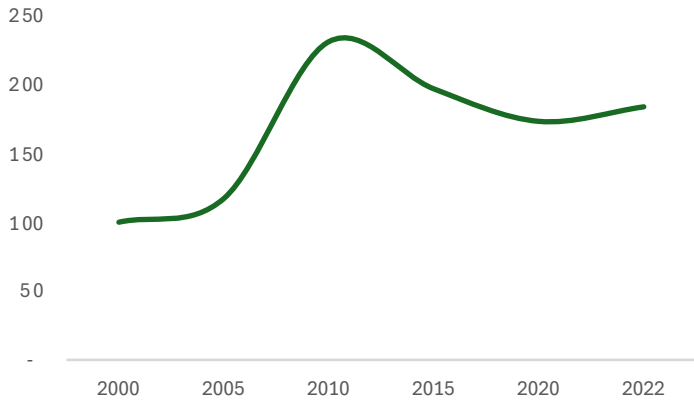


(14)



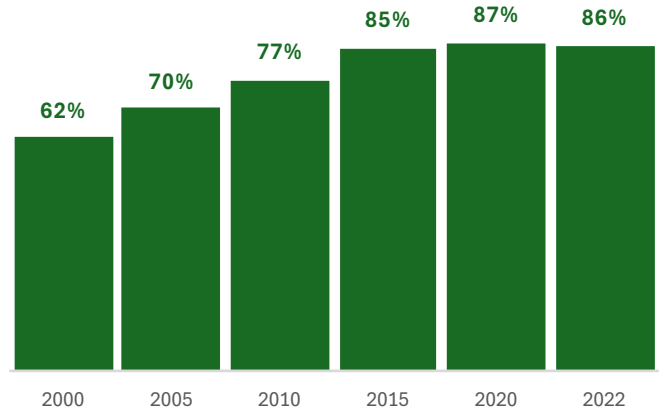
Road transport CO2 emissions trend

Assuming 2000 value as base (100)



(15)

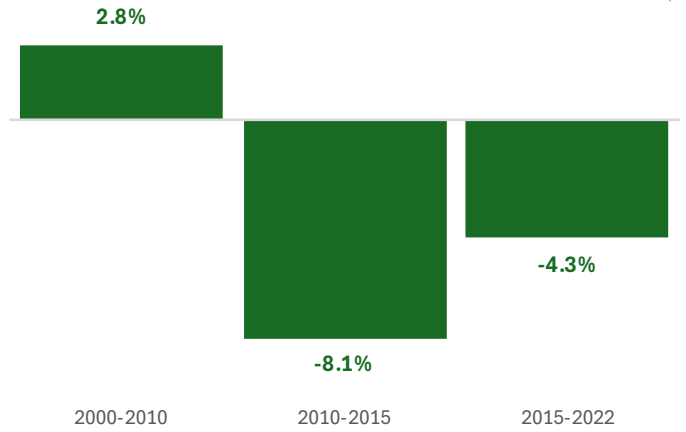
Share of road transport in total transport CO2 emissions



(15)

Between 2010-2019, Solomon Islands's road transport fossil CO2 emissions was contracting -0.4% annually. After the COVID-19 pandemic, road transport CO2 emissions was growing 3.0% annually.

Road transport CO2 emissions intensity with GDP trend



(3,15)

Transport fossil fuel subsidies, cumulative from 2010 to 2022

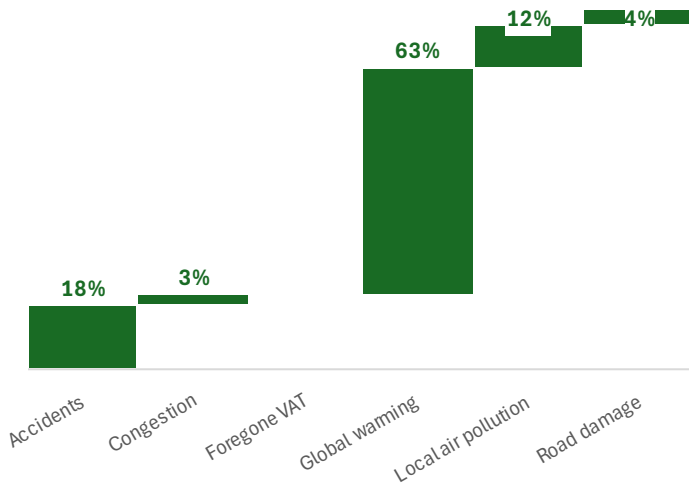
None

0.0% of Asia-Pacific total

(16)

Implicit fossil fuel subsidies due to externalities

(17)



Data includes all sectors and all fuel types

Climate Resilience and Disaster Preparedness

Expected annual damages to road and rail infrastructure due to hazards (2019)

1.63 million USD

(18)

National road vulnerability index ranking (2023)

n.d.

(20)

Share of road in total transport infrastructure in multihazard average annual loss to transport infrastructure (2023)

83.3%

(19)

Share of population in low elevated coastal zones (2018)

12.9%

(21)

Pollution, Water and Land Management, Preserving Biodiversity, and Sustainable Materials

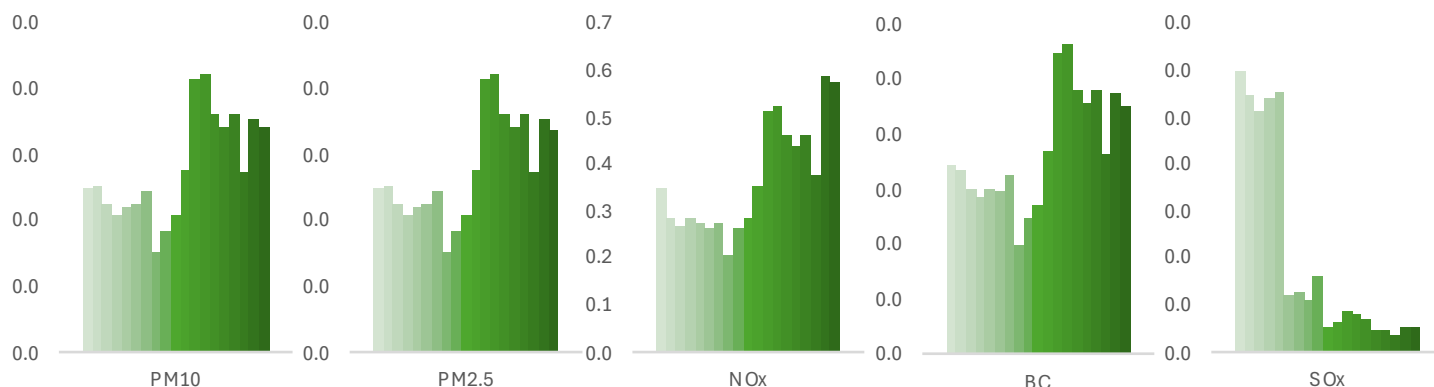
Paved roads (2023)

n.d.

(1)

Road transport air pollutant emissions, thousand tonnes (2000-2018)

(15)



In 2022, road transport contributed 21.0%, re-suspended dust contributed 17.0% in transport PM10 emissions. In total, road transport contributed about 21.5% in total PM10 emissions in Solomon Islands.

Deaths due to occupational exposure to diesel engine exhaust | 2000-2010

9 deaths

| 2011-2018

15 deaths

(22)

Terrestrial and marine protected areas (2022)

0.2%

(3)

(% of total territorial area)

Terrestrial protected areas

2.0%

(13)

(% of total land area)

Marine protected areas

0.1%

(3)

(% of territorial waters)

Share of biofuels in road transport energy consumption (2020)

n.d.

Domestic consumption per capita, tonnes (2024)

| Solomon Islands

5.8 tonnes

| Asia-Pacific

13.8 tonnes

(23)

Forest area (2021)

90.1%

(3)

(% of land area)

Domestic consumption is the total amount of materials directly used in the economy (used domestic extraction plus imports), minus the materials that are exported.

Policy Measures

Policy document	Year	Road-related measures
Medium Term Transport Action Plan 2019-2023	2018	Active transport infrastructure expansion, Transport asset management funding strategy, Asphalt mix resurfacing, Routine transport asset maintenance, General transport asset management, Investment required for specific projects, Road infrastructure expansion
Solomon Islands 2021 Nationally Determined Contributions	2021	Disaster notification/ early warning system, Relocation from climate-risk areas, General transport finance, Adaptation transport laws, regulations and programmes
Global Status Report on Road Safety 2018	2018	Upgrading high risk locations for road safety, National speed law, Audits/ star rating for existing roads for road safety, Audits/ star rating required for new road infrastructure for road safety
Second National Communication - SLB	2017	Relocation from climate-risk areas
National Development Strategy 2016 - 2035	2016	Disaster notification/ early warning system, General transport asset management, Measures to improve rural-urban connectivity, Road infrastructure expansion, Development of transport plan/ policy
Solomon Islands National Climate Change Policy 2023-2032	2023	Development of transport adaptation/ emergency/ disaster plan/ policy
Voluntary National Review 2020 - SLB	2020	Development of transport adaptation/ emergency/ disaster plan/ policy
The Solomon Islands Long-Term Low Emissions Development Strategy (LEDS)	2023	Relocation from climate-risk areas, Vehicle taxes, Development of transport adaptation/ emergency/ disaster plan/ policy, Development of transport plan/ policy
Medium Term Development Plan 2016-2020	2015	General infrastructure improvements, Disaster notification/ early warning system, Routine transport asset maintenance, Surface treatment resurfacing, Transport infrastructure resilience, General transport asset management, Measures to improve rural-urban connectivity
Policy Roadmap for E-mobility in the Solomon Islands	2022	Vehicle inspection and maintenance, Fuel tax, Vehicle taxes, General economic instruments, General transport finance
Solomon Islands National Transport Plan 2017-2036	2016	Transport asset management funding strategy, General transport asset management, Investment volume for transport, Reference to finance mechanisms within country, Road infrastructure expansion
Ministry of Infrastructure Development Corporate Plan	2016	Vehicle inspection and maintenance, Transport asset management information system, Transport asset condition assessment, General transport asset management, Reference to finance mechanisms within country, Road infrastructure expansion
Solomon Islands Priority Infrastructure Investment Pipeline	2021	General infrastructure improvements, General transport asset management, Measures to improve rural-urban connectivity, Road infrastructure expansion
Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles	2020	Vehicle inspection and maintenance, Implementation of vertical deflections on roads
Traffic Act 1996	1996	National speed law, Passenger and freight load limits, Road-side checks on speeding, Road-side checks on overloading

Policy Targets

Policy document	Target year	Road-related targets
Solomon Islands Priority Infrastructure Investment Pipeline	2035	The NDS determines that, by 2035, at least 40% of Solomon Islanders in rural areas should have access to essential services as a direct result of the rehabilitation and construction of new roads, bridges, and wharves.

Notes



(*) Policy measures and targets were extracted from policy documents as listed in the ATO National Transport Policies Database

<https://bit.ly/ATOpolicyrepository>

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- (23) Global Materials Flow Database (UNEP, 2023), <https://www.resourcepanel.org/global-material-flows-database>

Disclaimer

This profile was developed by Asian Transport Outlook in support of TA-6756 Improving Infrastructure Sustainability Through Better Asset Management – Developing a Green Roads Toolkit and Guidance for ADB Projects. The ATO is an initiative developed under TA-6763 REG: Accelerating Innovation in Transport - Asian Transport Outlook: Phase 3 (55119-001) of the Asian Development Bank (ADB) and is also being supported by the Asian Infrastructure Investment Bank (AIIB) through Purchase Order No. CW39446 AIIB Support: Asian Transport Outlook Phase 3.

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