

NAURU:

TRANSPORT POLICY PROFILE

Insights from the Asian Transport Outlook (ATO):
Transport observatory for the
Asia – Pacific region

27 Feb. 2024

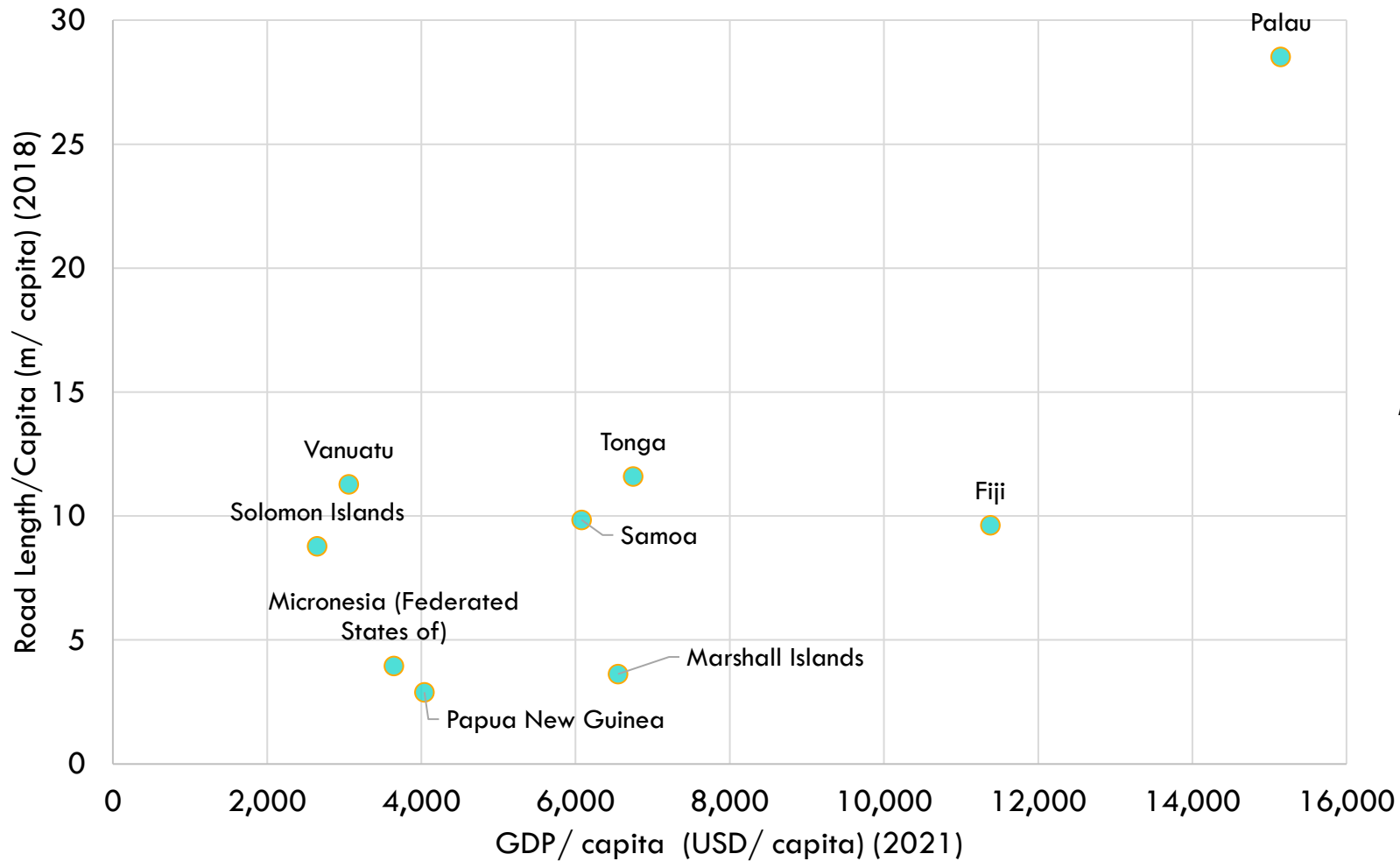


DATA INSIGHTS

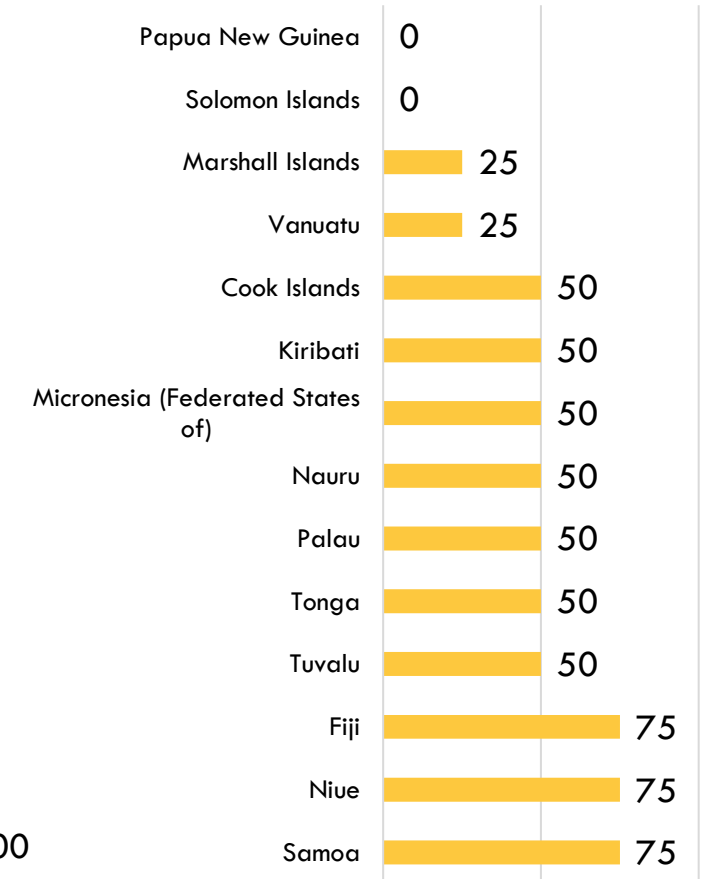
Focus on Solomon Islands, Nauru,
Vanuatu, Marshall Island, and
Palau

ROAD INFRASTRUCTURE AVAILABILITY

Road infrastructure availability

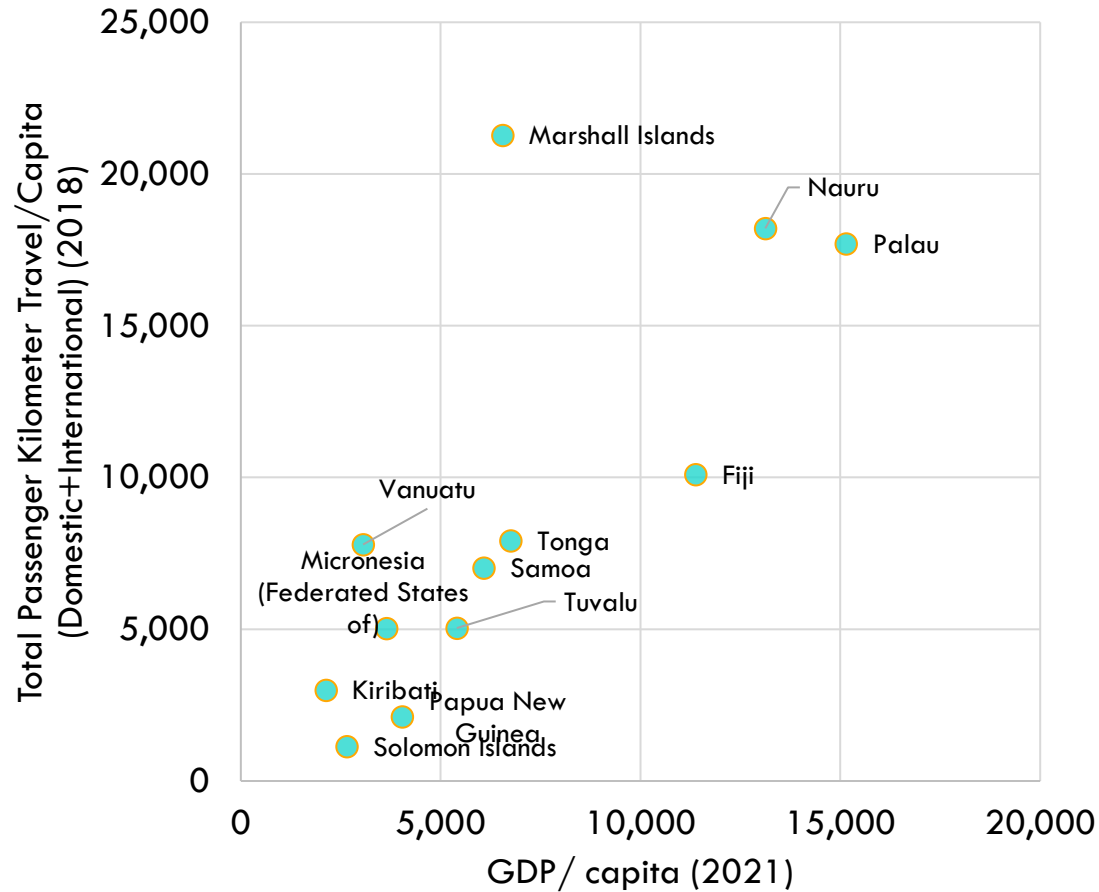


Adequacy of roads score (qualitative scoring) (2021)

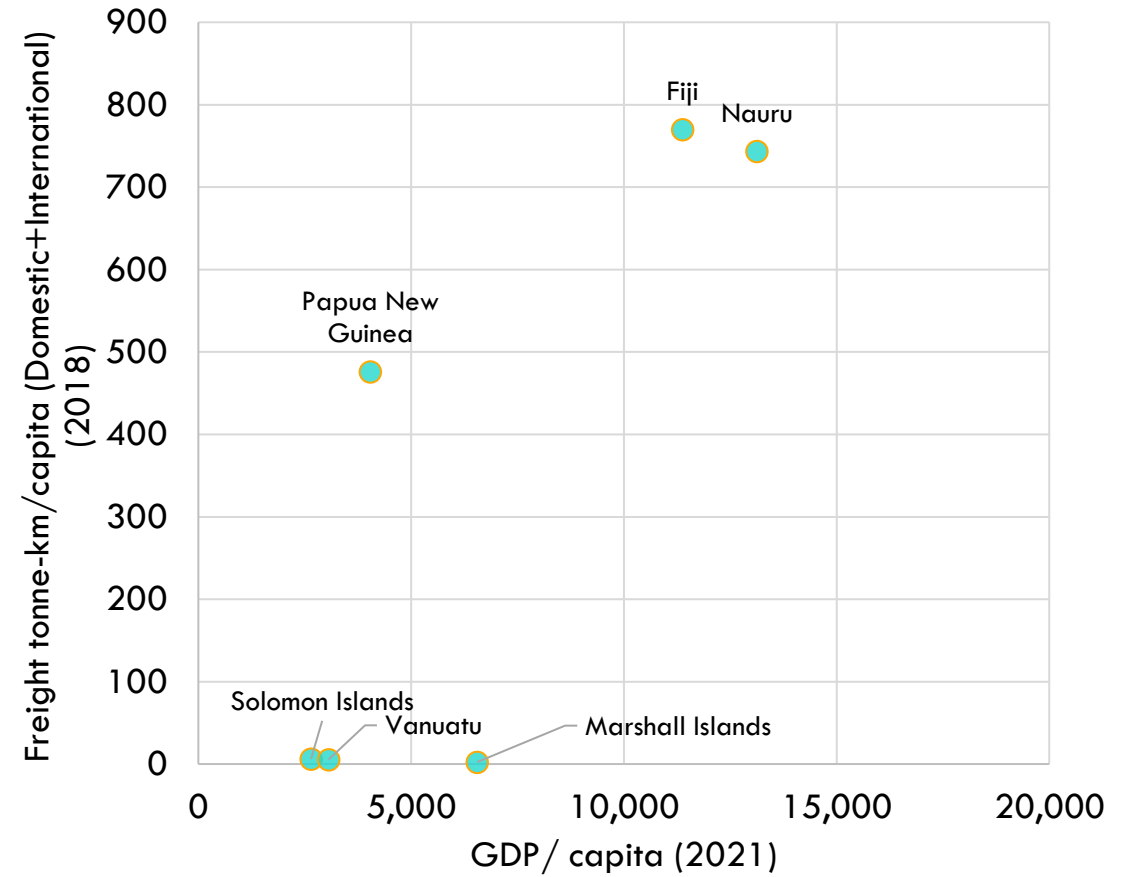


TRANSPORT ACTIVITY

Passenger Activity

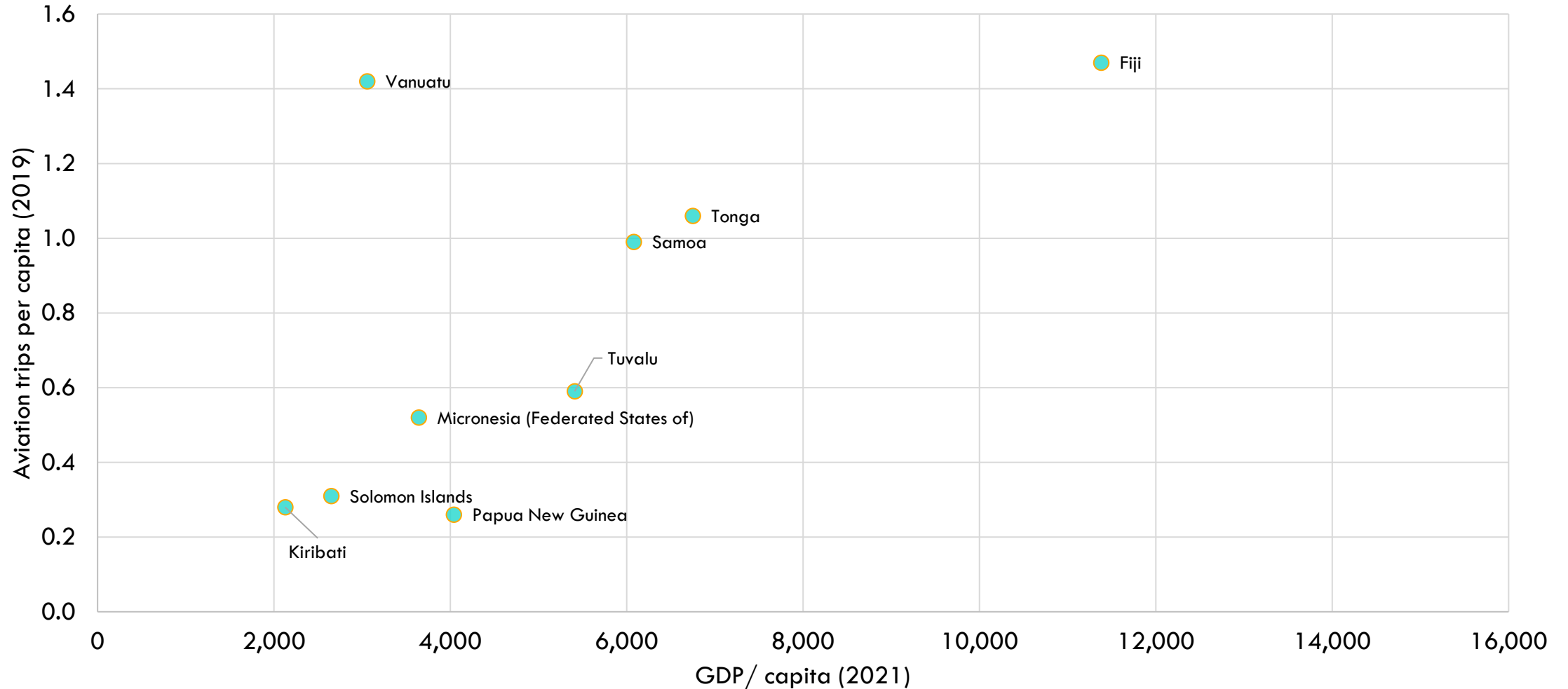


Freight Activity



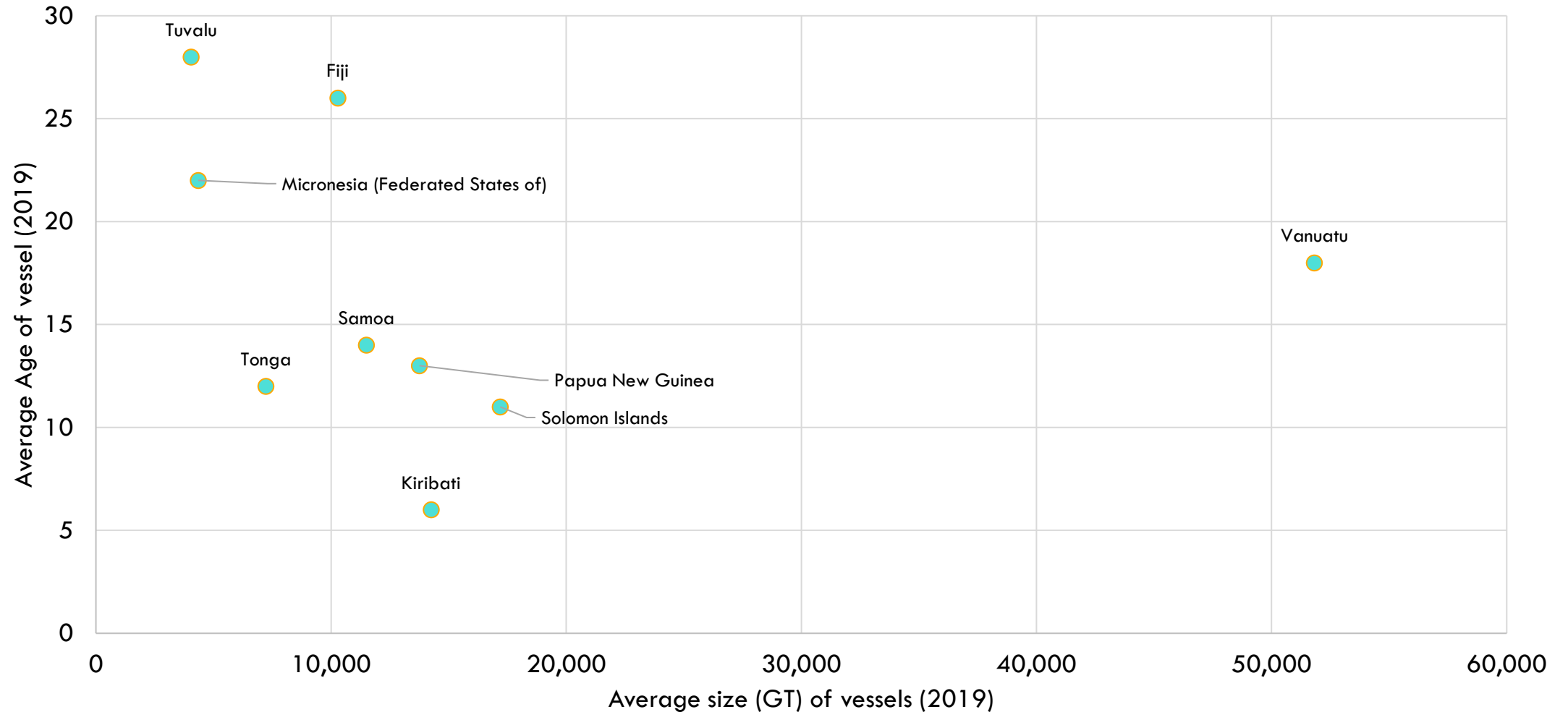
PASSENGER AVIATION ACTIVITY

Passenger Aviation Activity

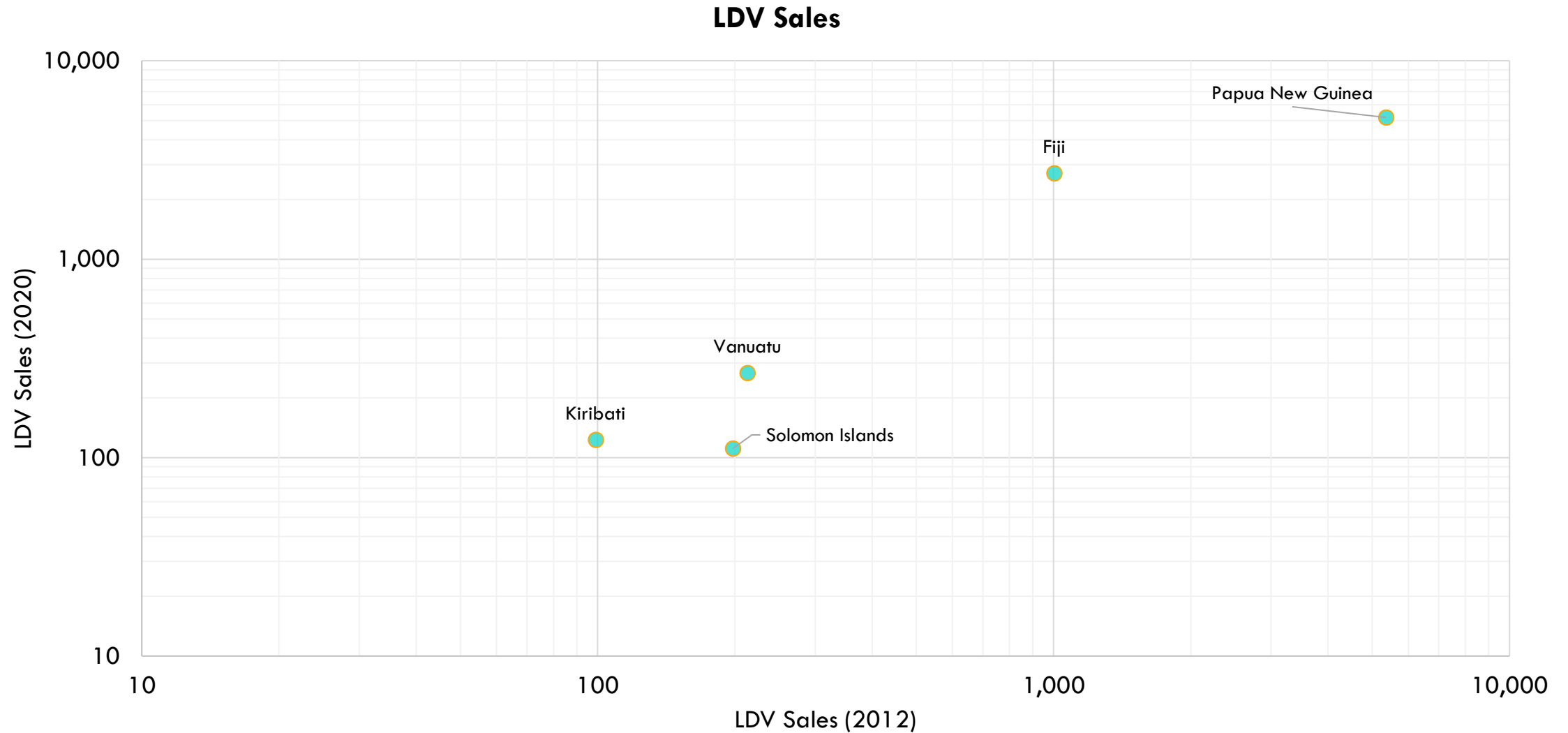


SHIPPING SERVICES

Shipping Services

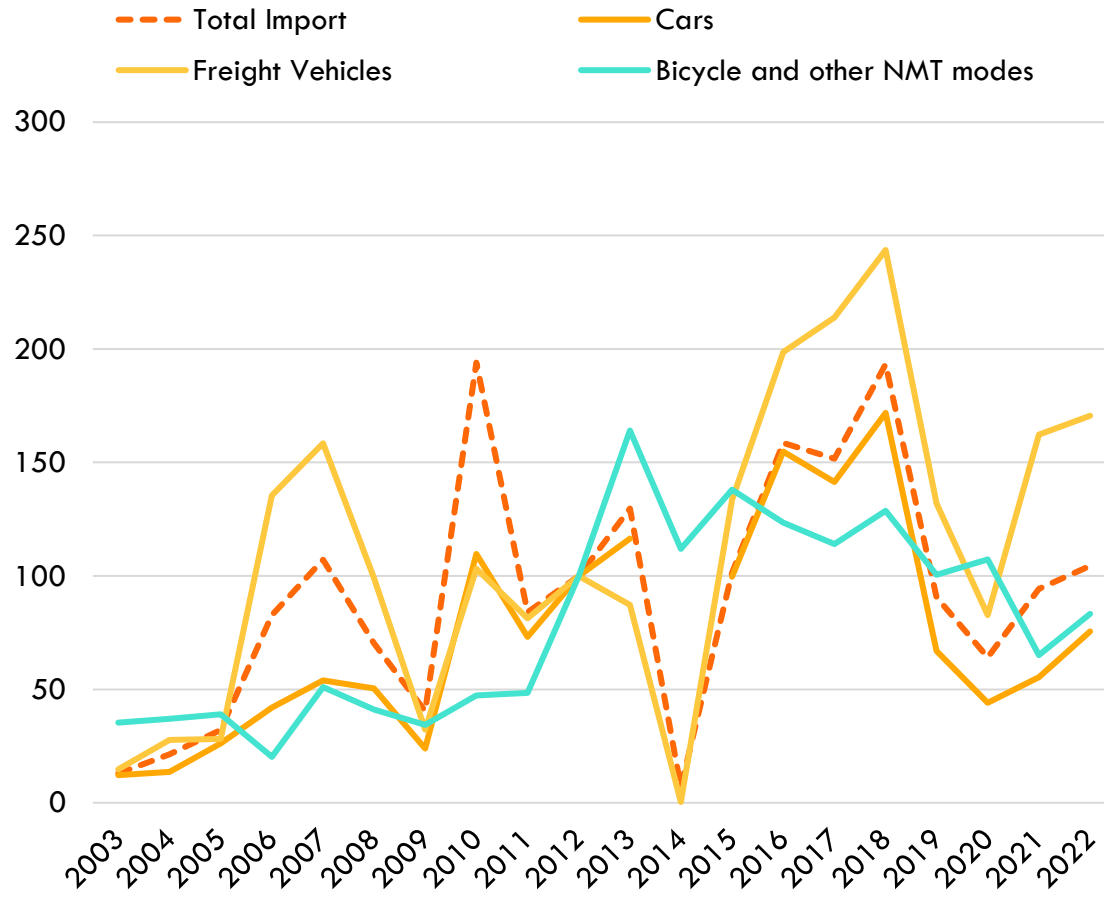


LDV SALES 2012 VS. 2020

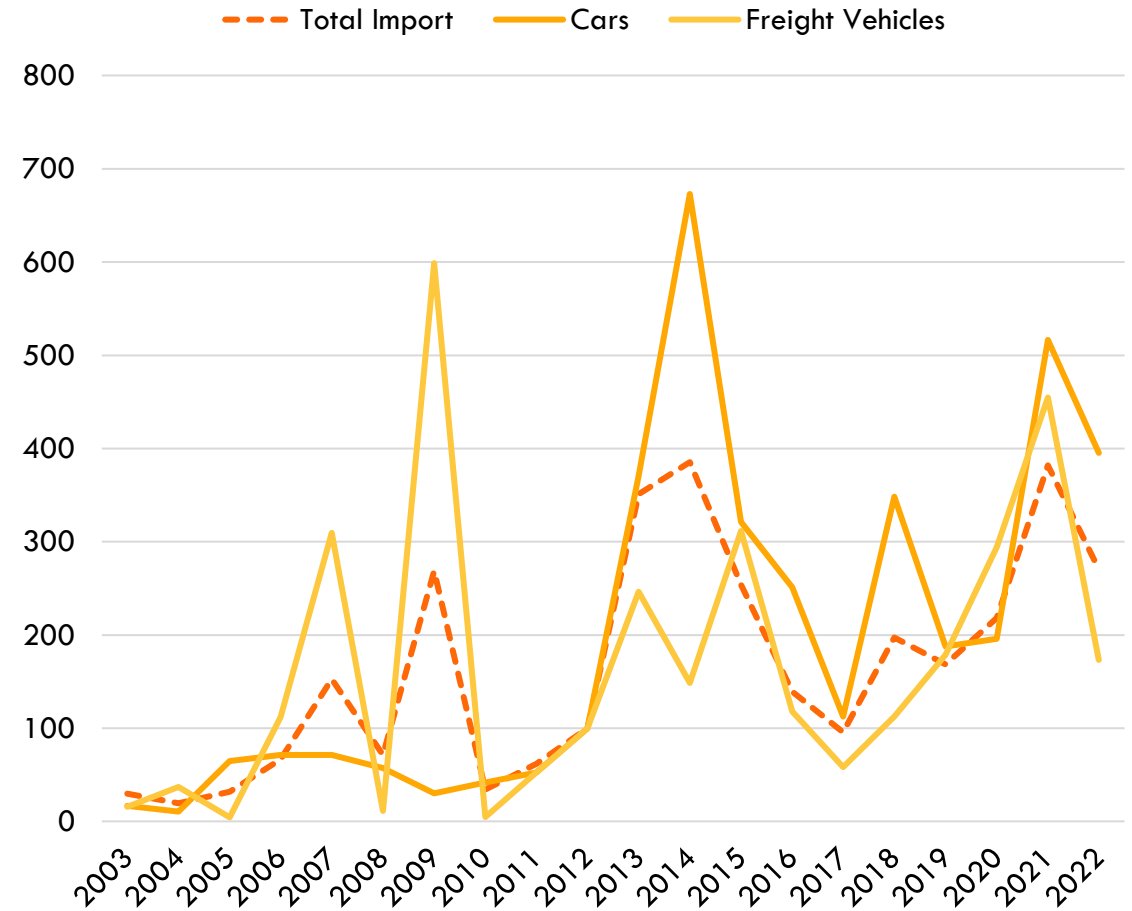


IMPORT TRENDS (2012 = 100)

Solomon Islands

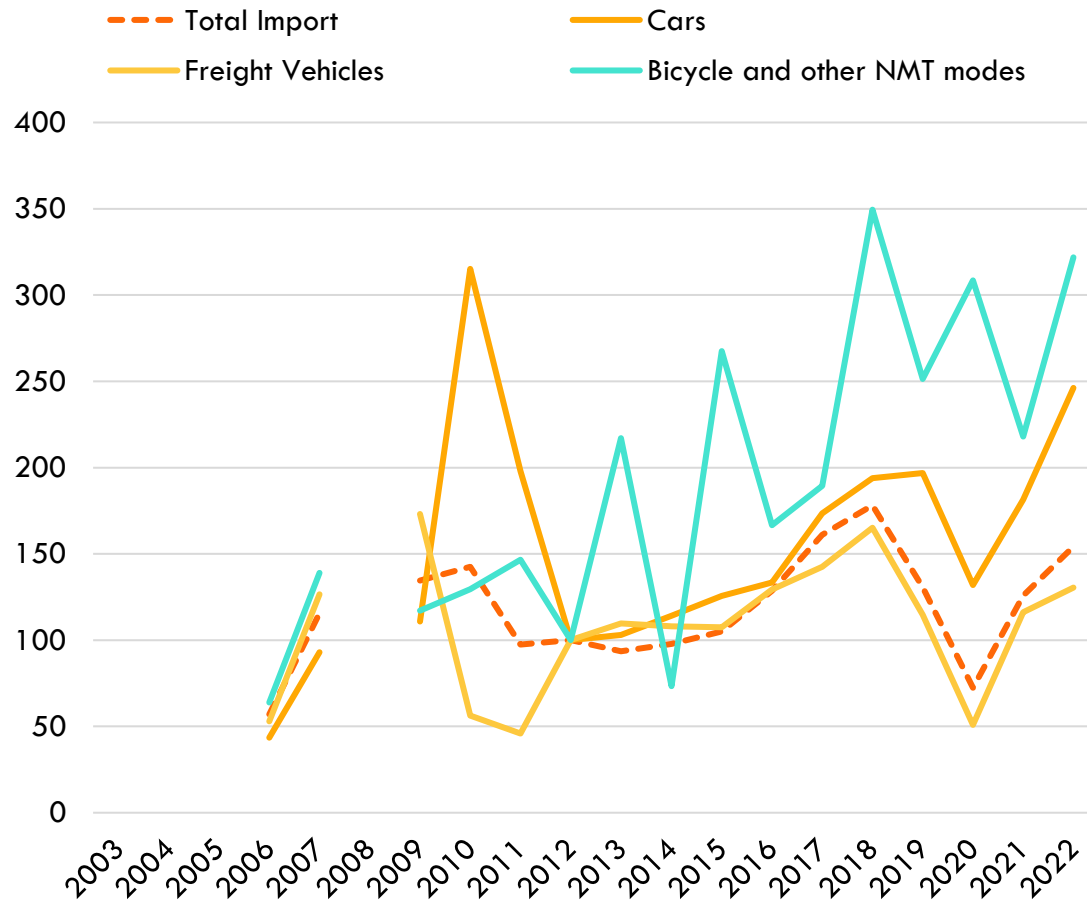


Nauru

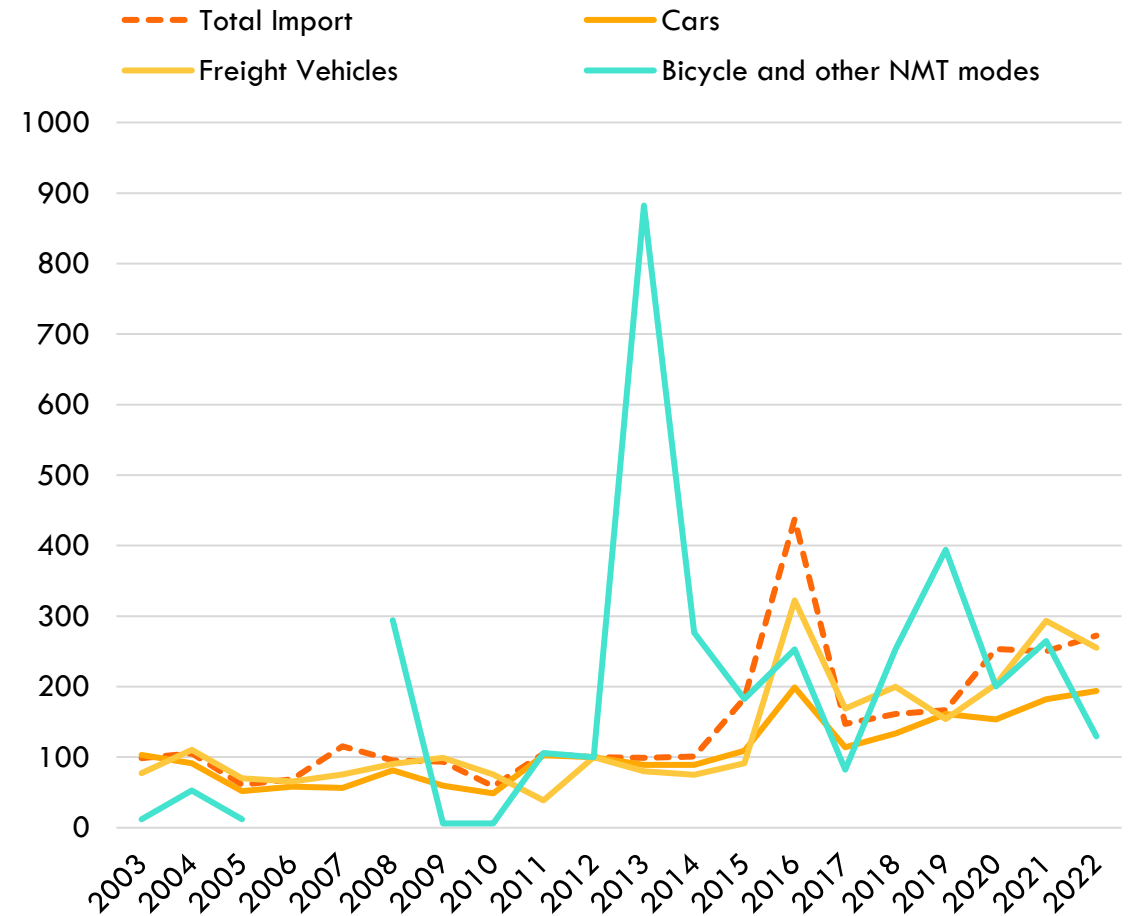


IMPORT TRENDS (2012 = 100)

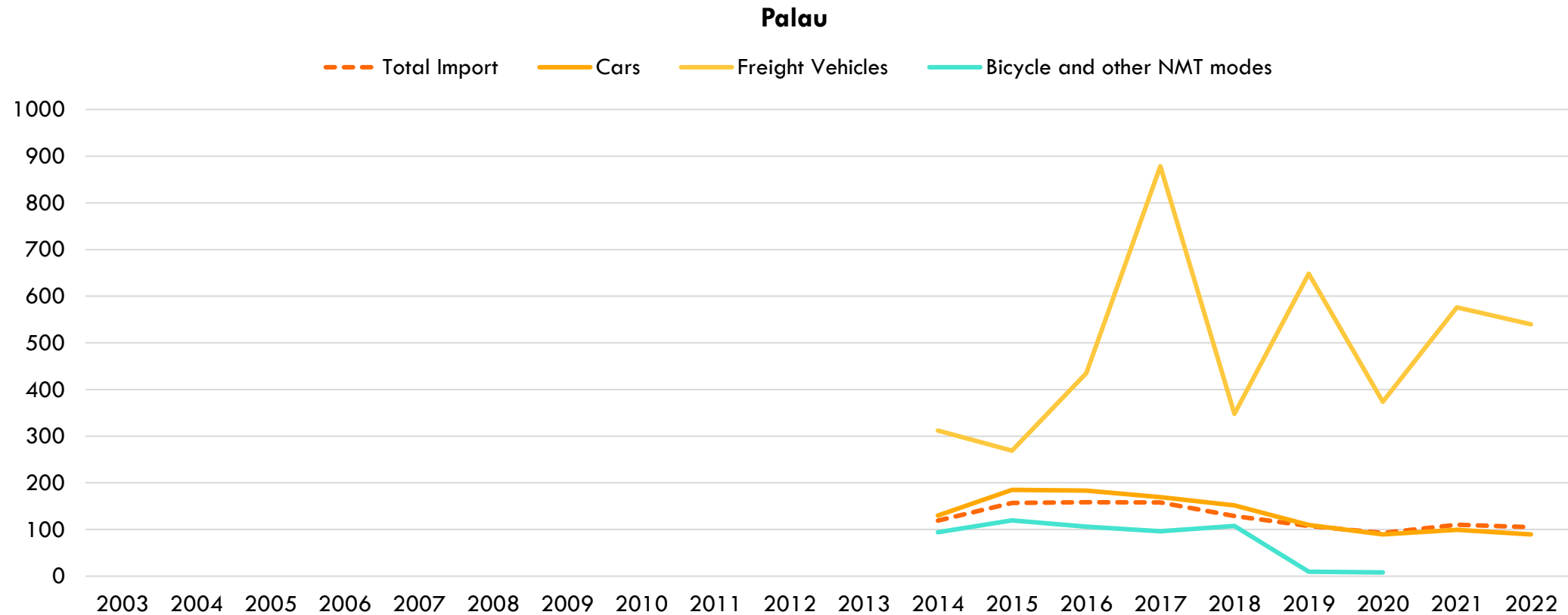
Vanuatu



Marshall Islands



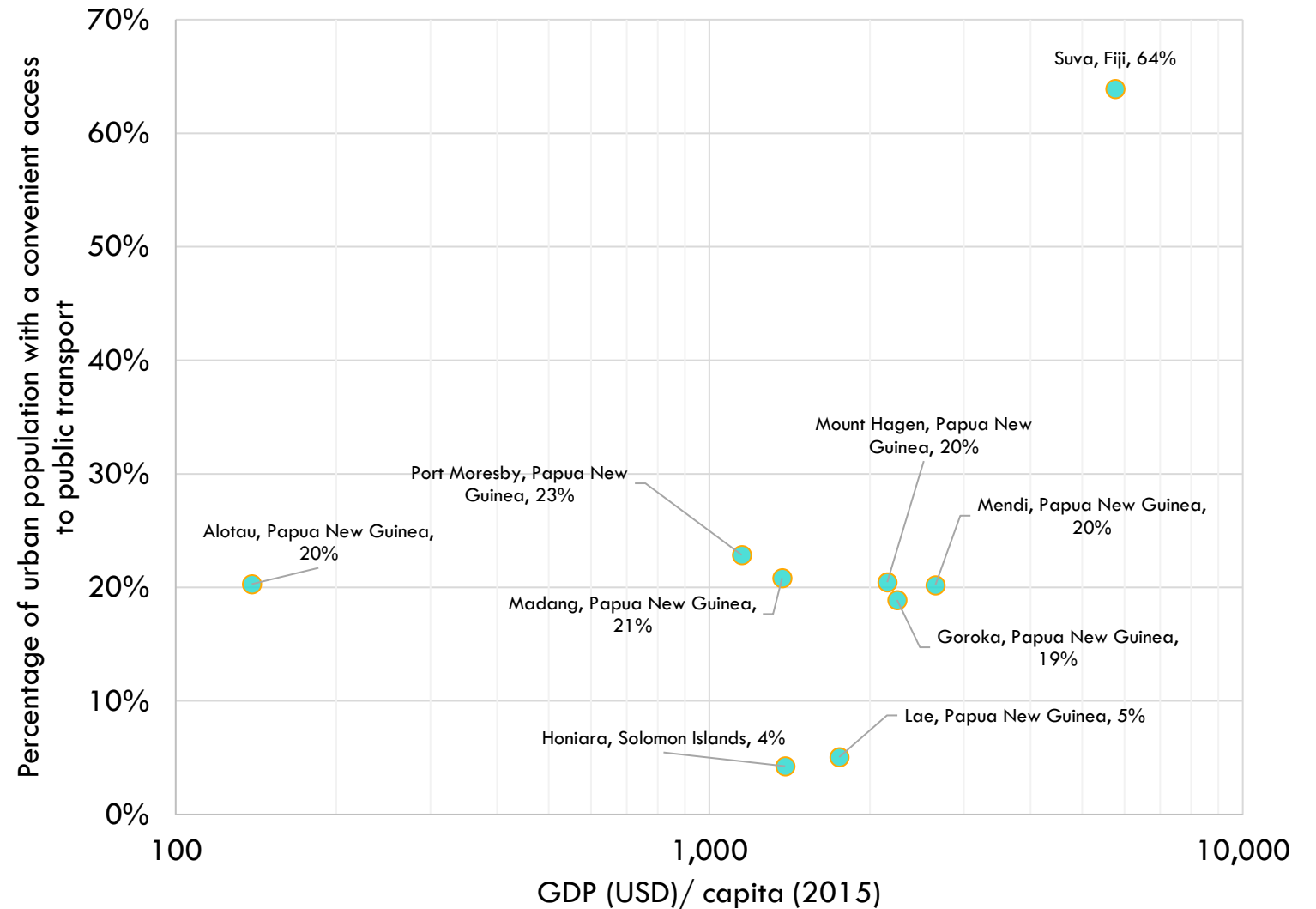
IMPORT TRENDS (2012 = 100)



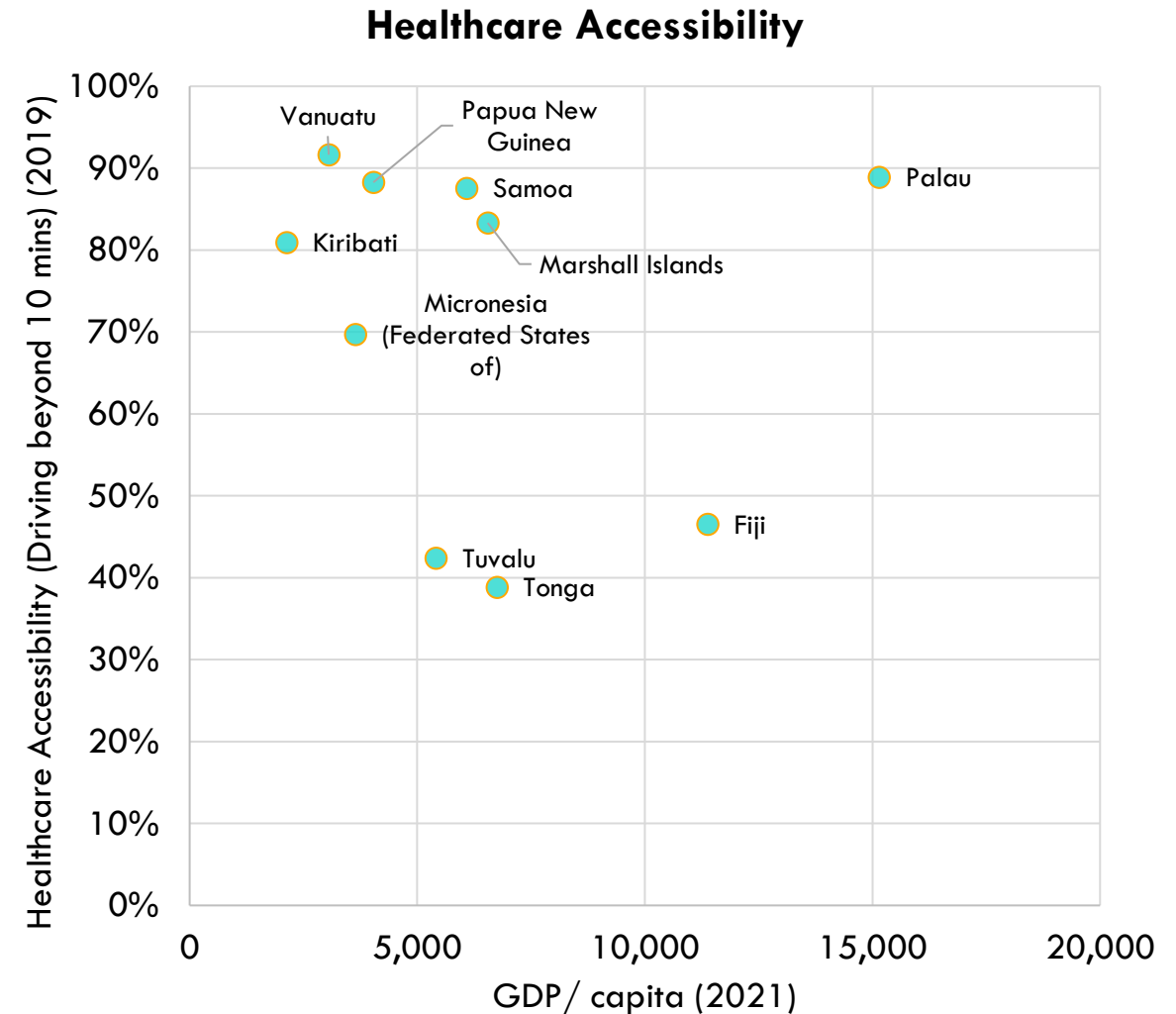
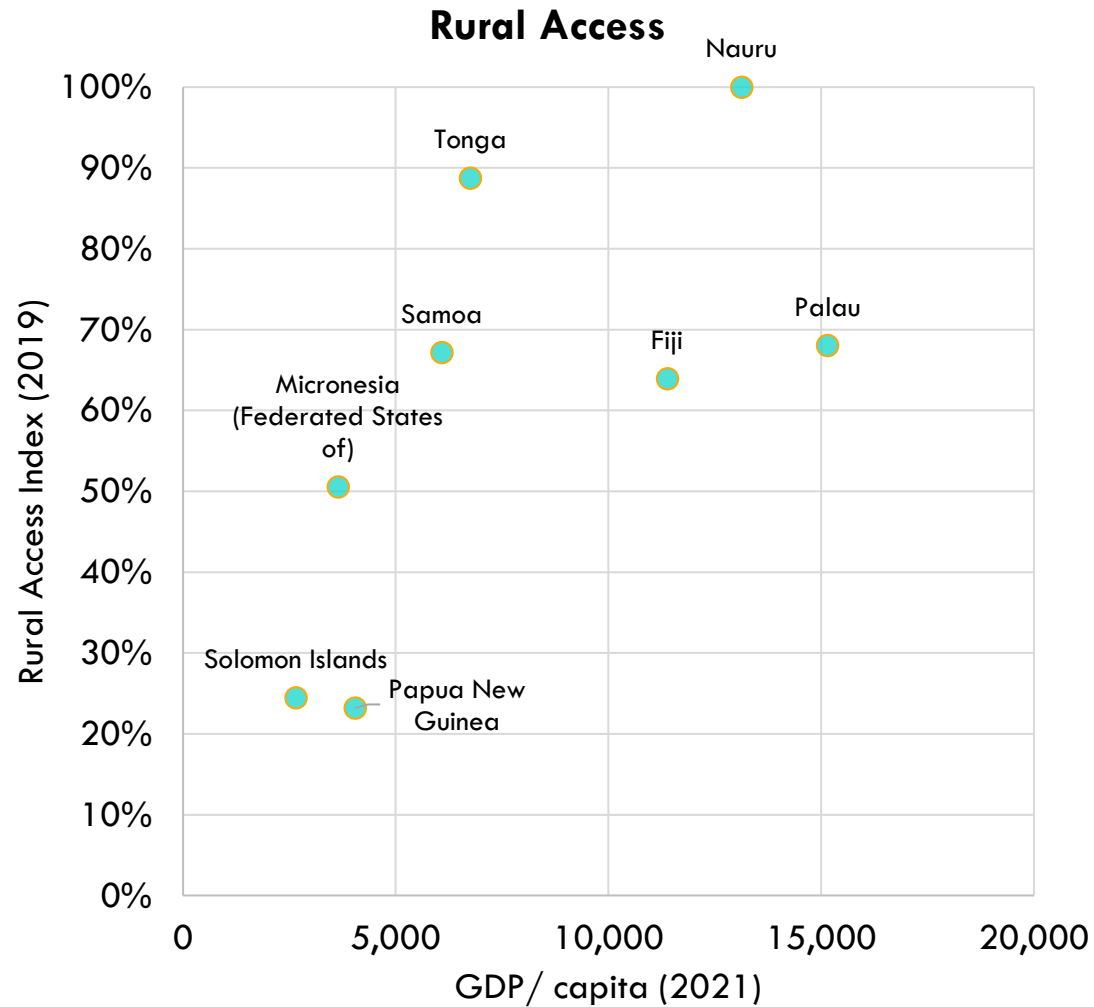
- Massive growth in the import of freight vehicles.

URBAN ACCESS

- The population weighted average for the Pacific SIDS indicates that only 27% of the urban population has a convenient access to public transport.
- A limitation of the data, is that it only considers formal public transport modes.
- Although a substantial data for mode share is not available, it can be reasonably understood that the formal public transport mode share is significantly low, because of the low accessibility.

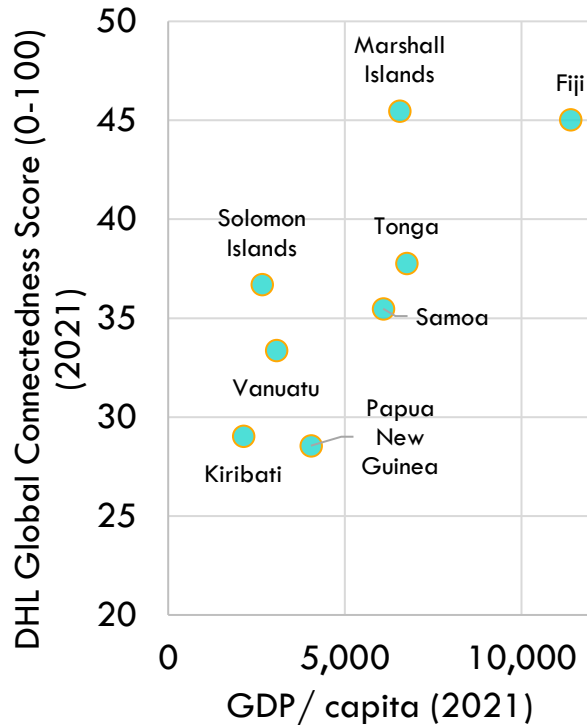


RURAL AND HEALTHCARE SERVICES ACCESS

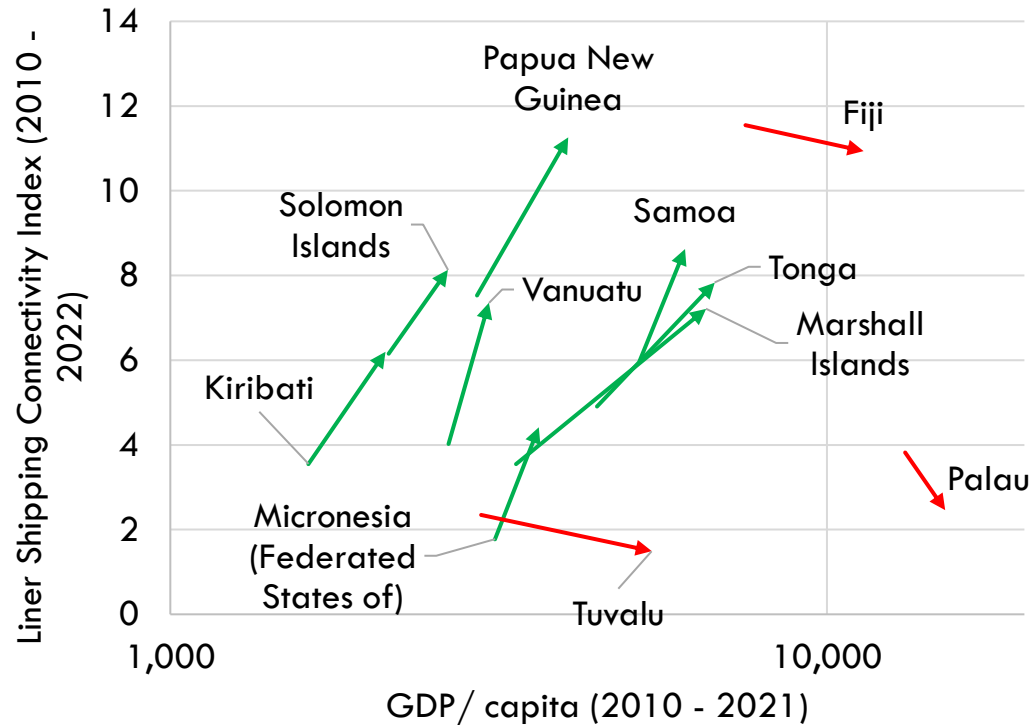


NATIONAL LEVEL CONNECTIVITY

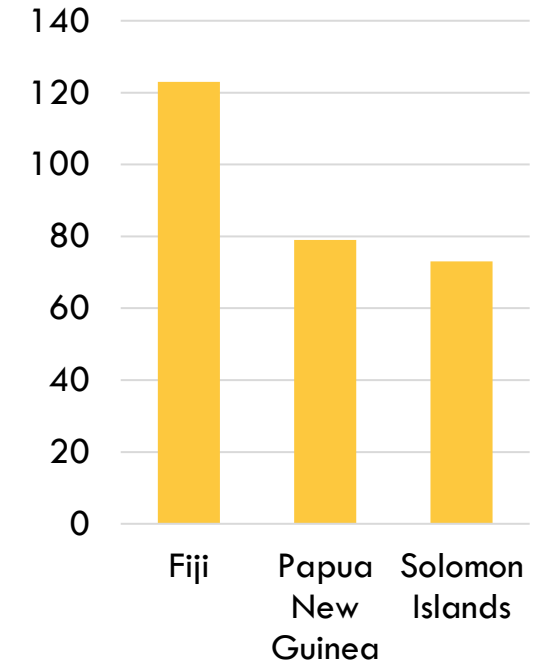
Global Connectedness



Liner Shipping Connectivity Index



Overall LPI Rank (2023)



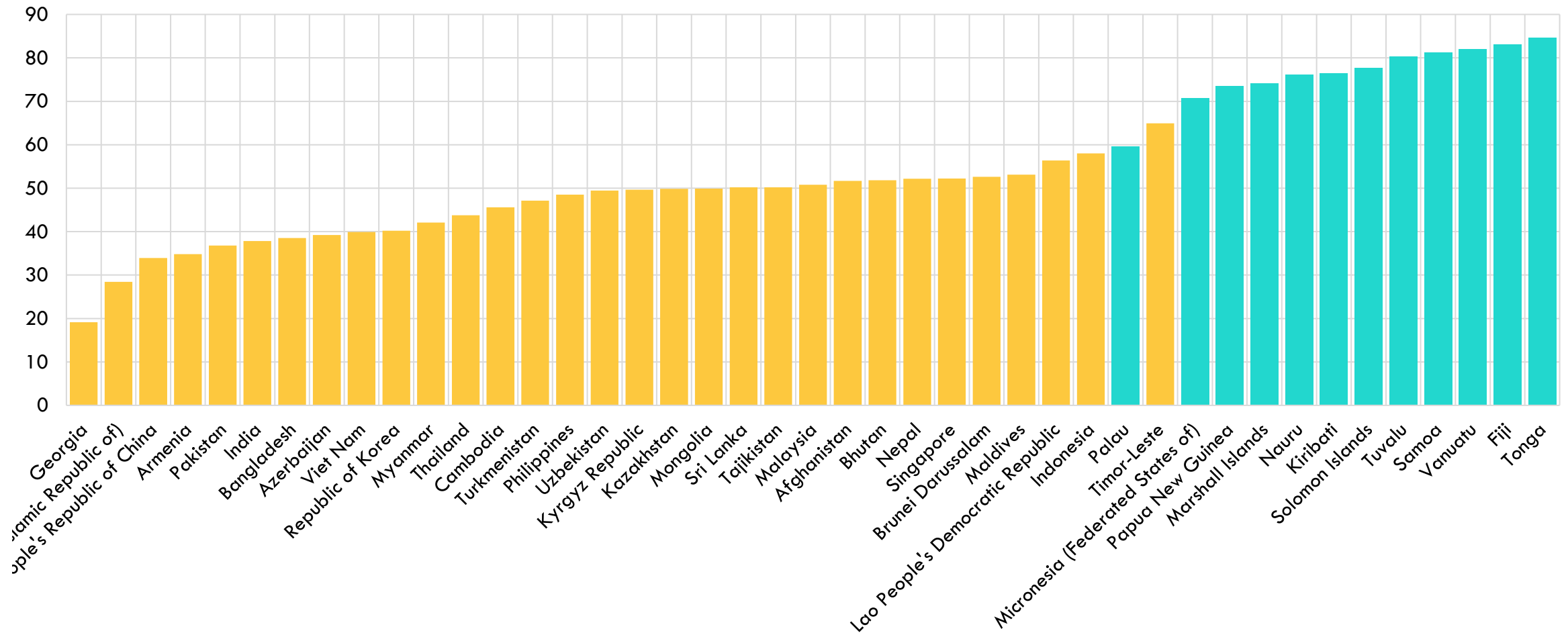
- DHL Global Connectedness Index (GCI) is a measure of globalization. It highlights key developments in international flows of capital, trade, information, and people.

- 27% of the Pacific SIDS have downgraded the Liner Shipping Connectivity Index between 2010 and 2022.
- The Marshall Islands showed a steep improvement

- Generally, the overall LPI Ranks for the Pacific SIDS is low.

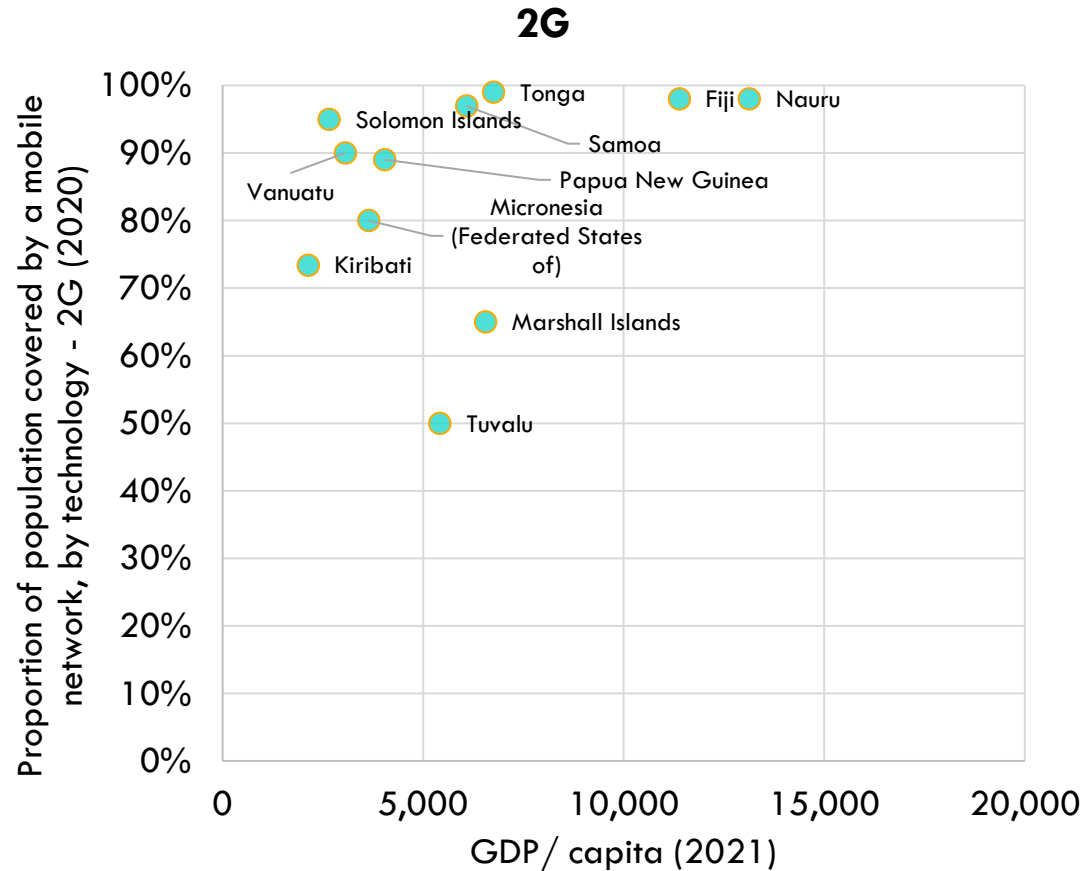
REMOTENESS INDEX

Remoteness index, 2015



- Remoteness is defined as the tradeweighted average of the distance from world markets.
- All the Pacific SIDS lie highest in the Remoteness Index.

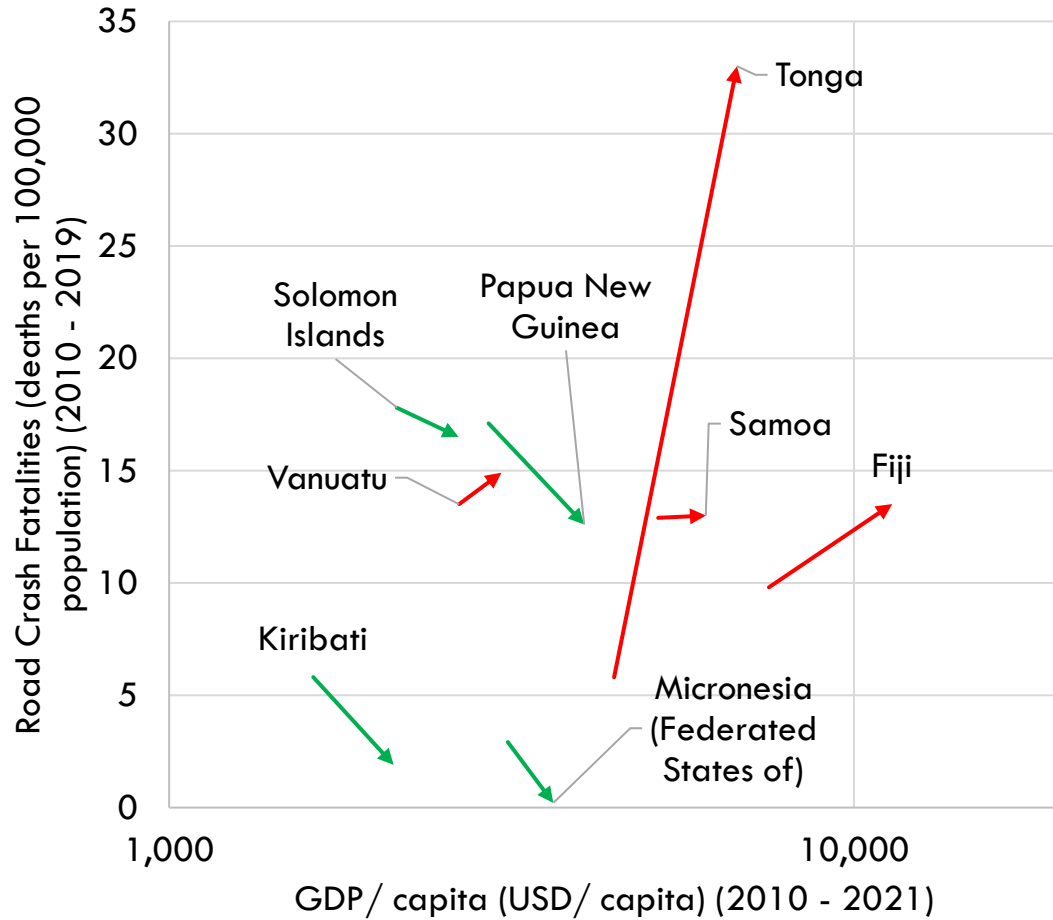
MOBILE NETWORK COVERAGE



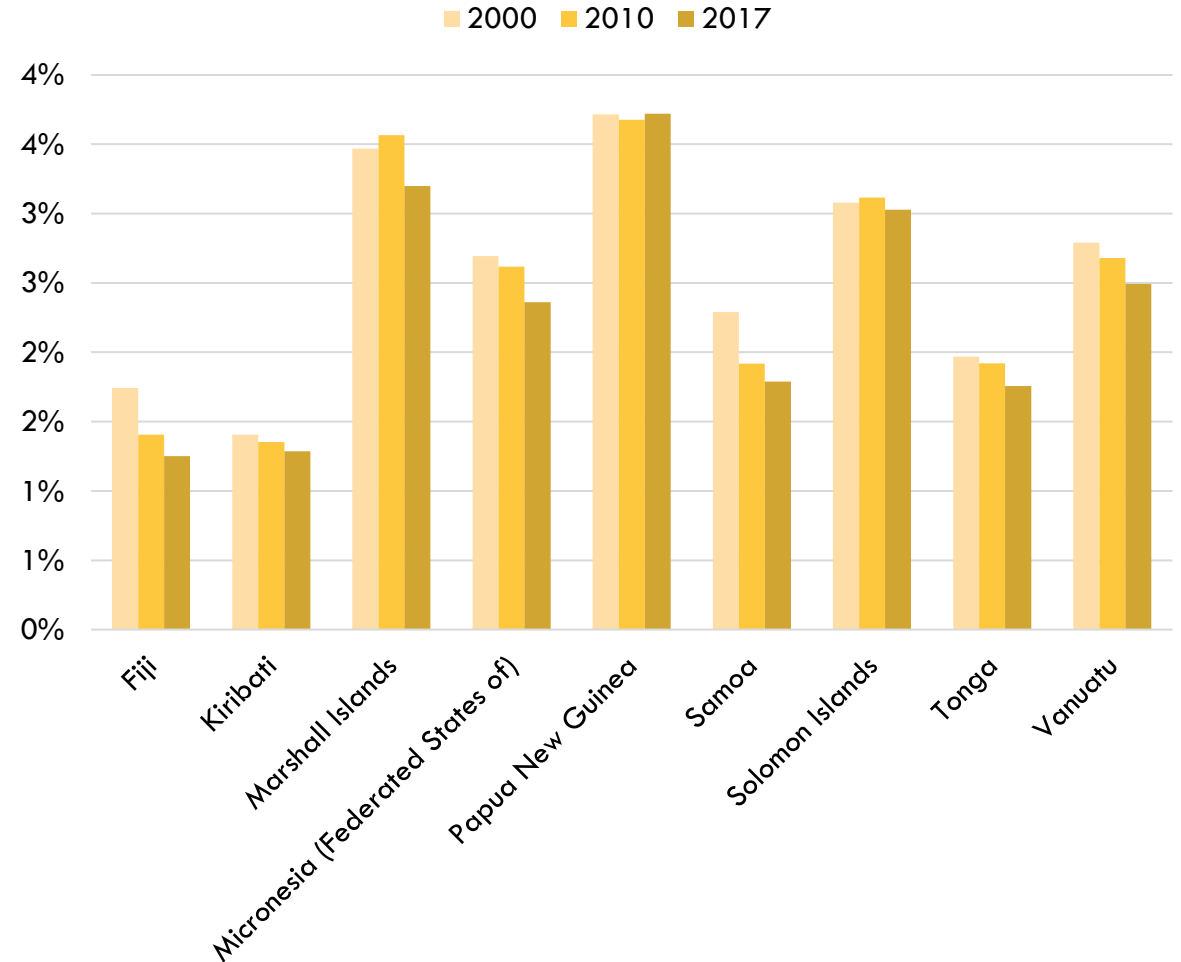
- Except for Marshall Islands and Tuvalu, the countries have more than 70% population covered by the 2G mobile network.
- The countries are slowly progressing in the 3G space.

ROAD SAFETY STATUS

Road Crash Fatalities

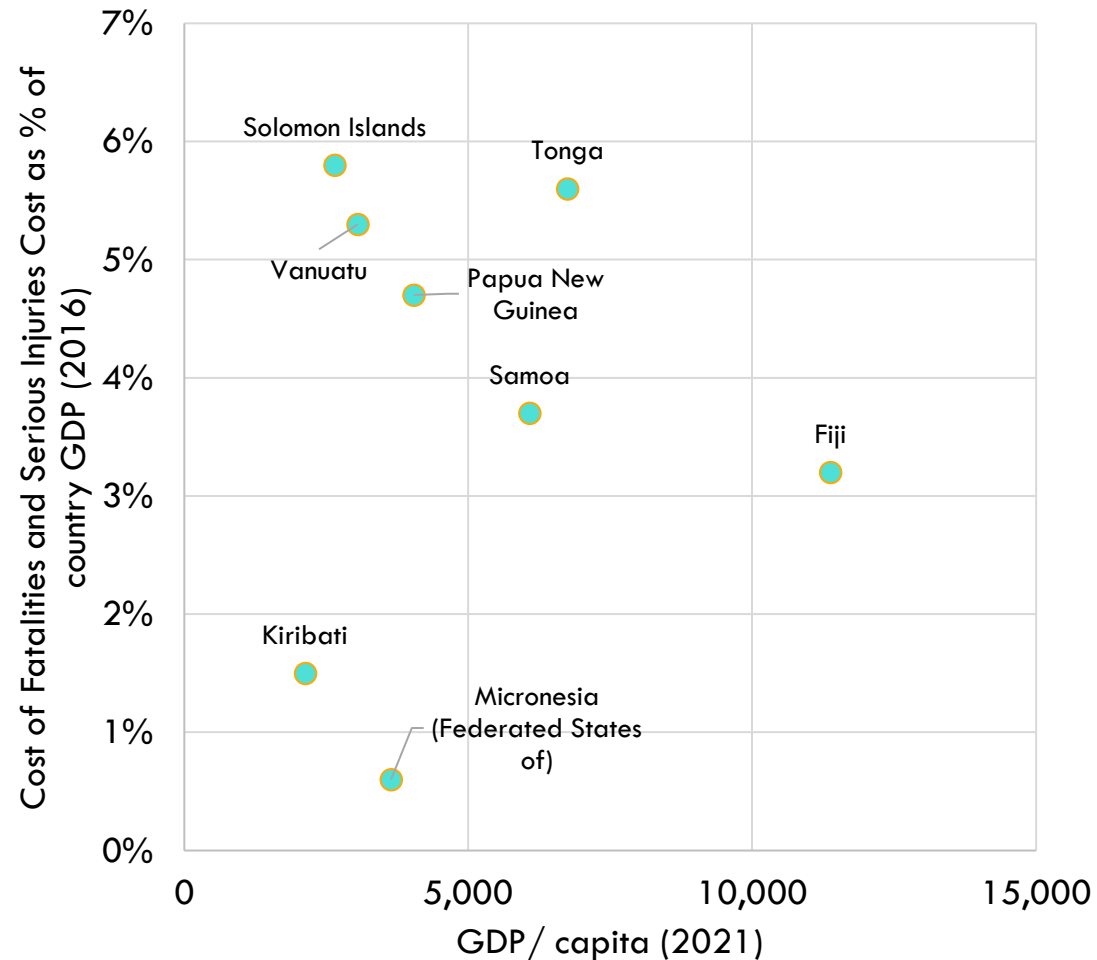


Share of Road Traffic Crash Fatalities in total deaths

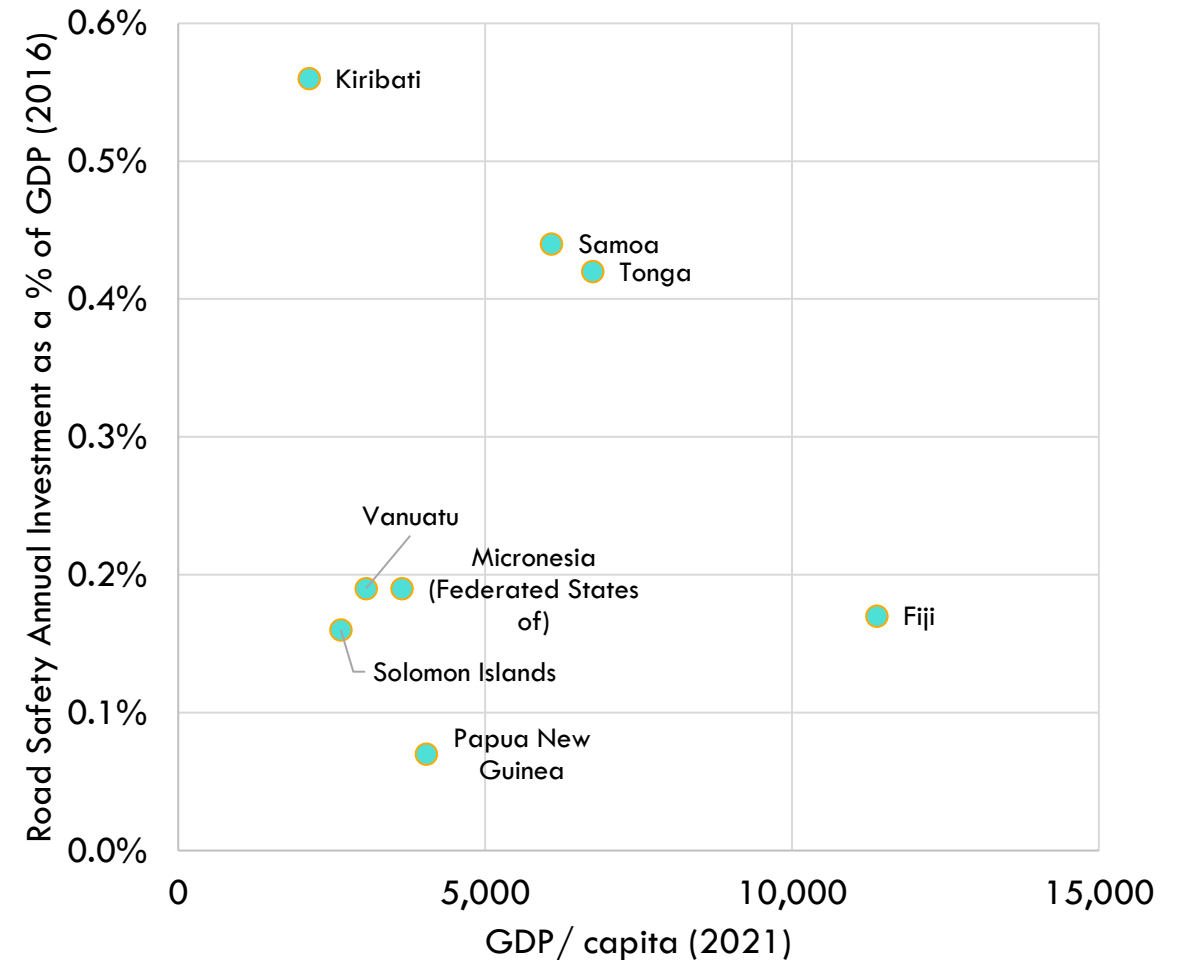


ROAD SAFETY STATUS

Road crash fatalities cost

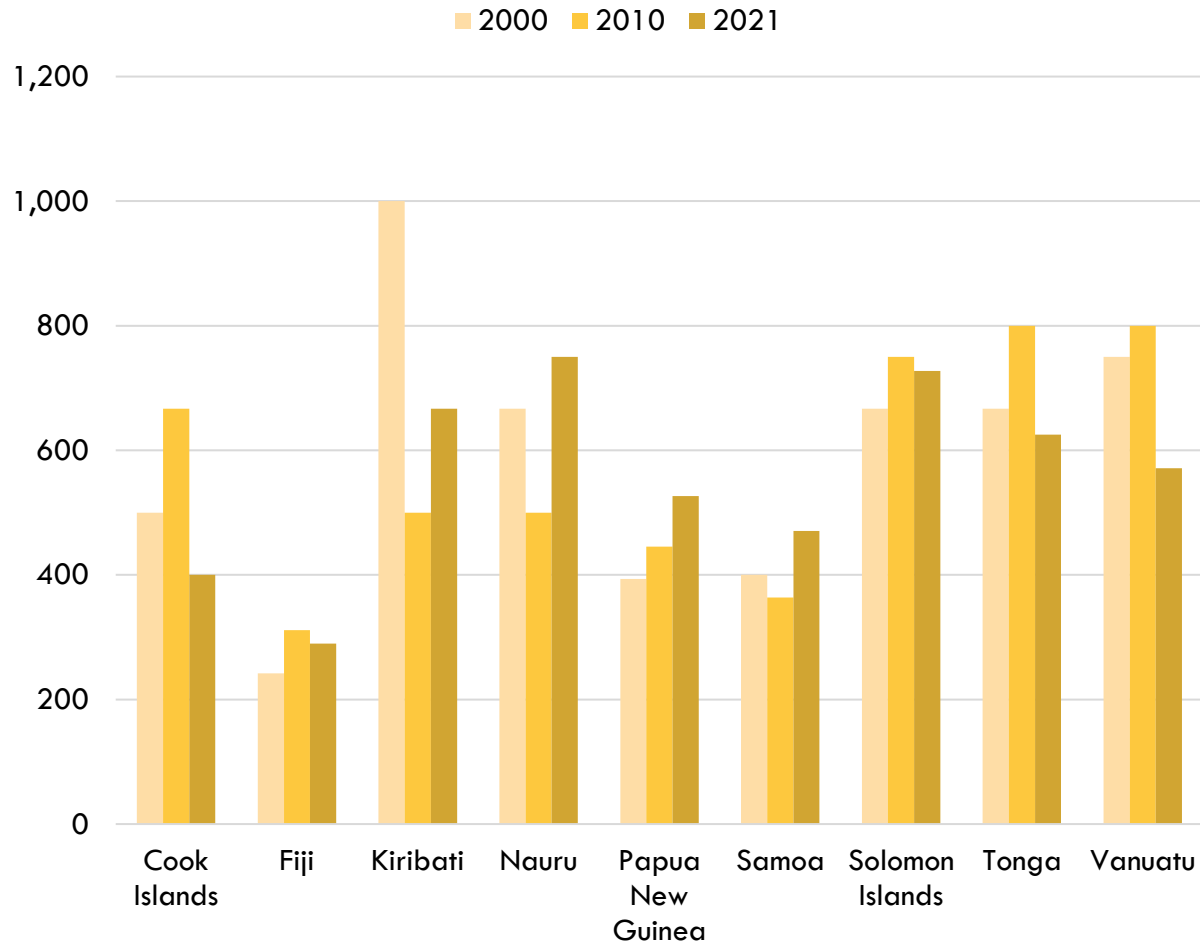


Road safety investments

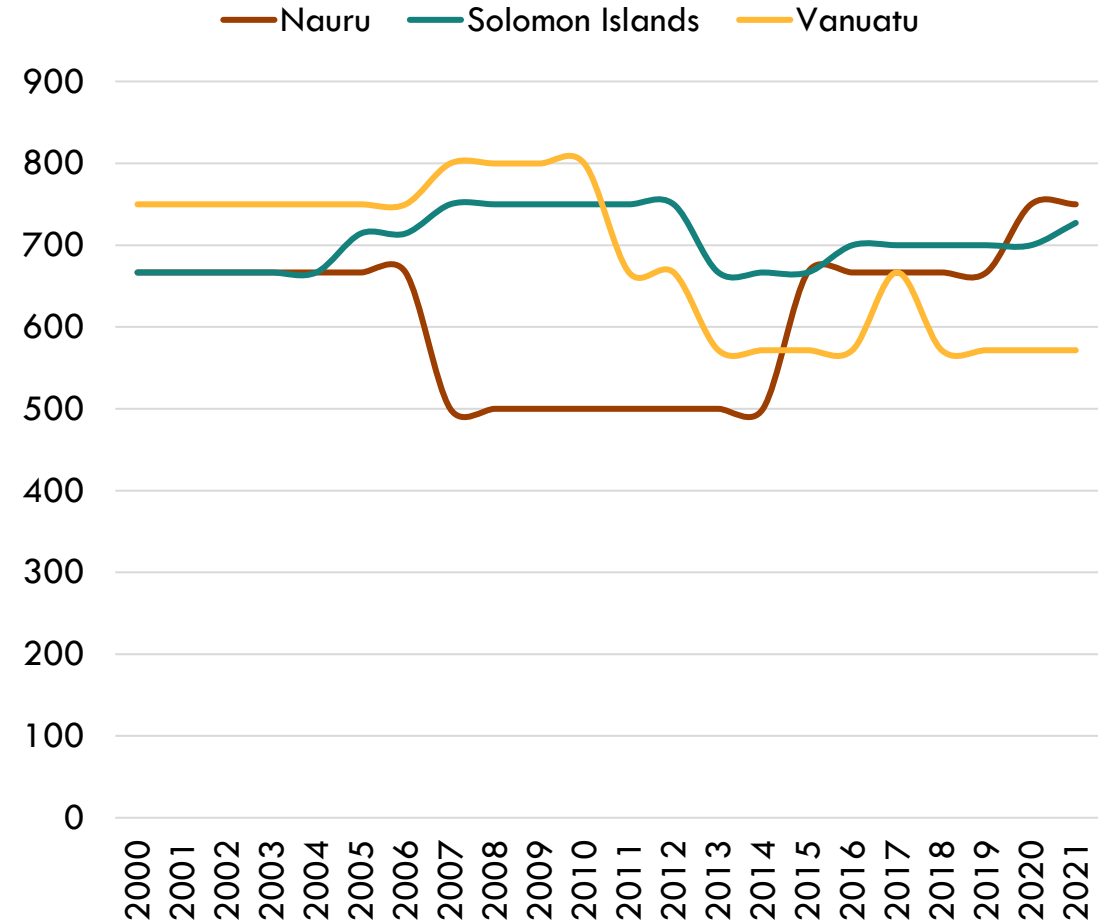


GRID EMISSIONS FACTOR

Grid emission factors for electricity (gCO₂/kWh)

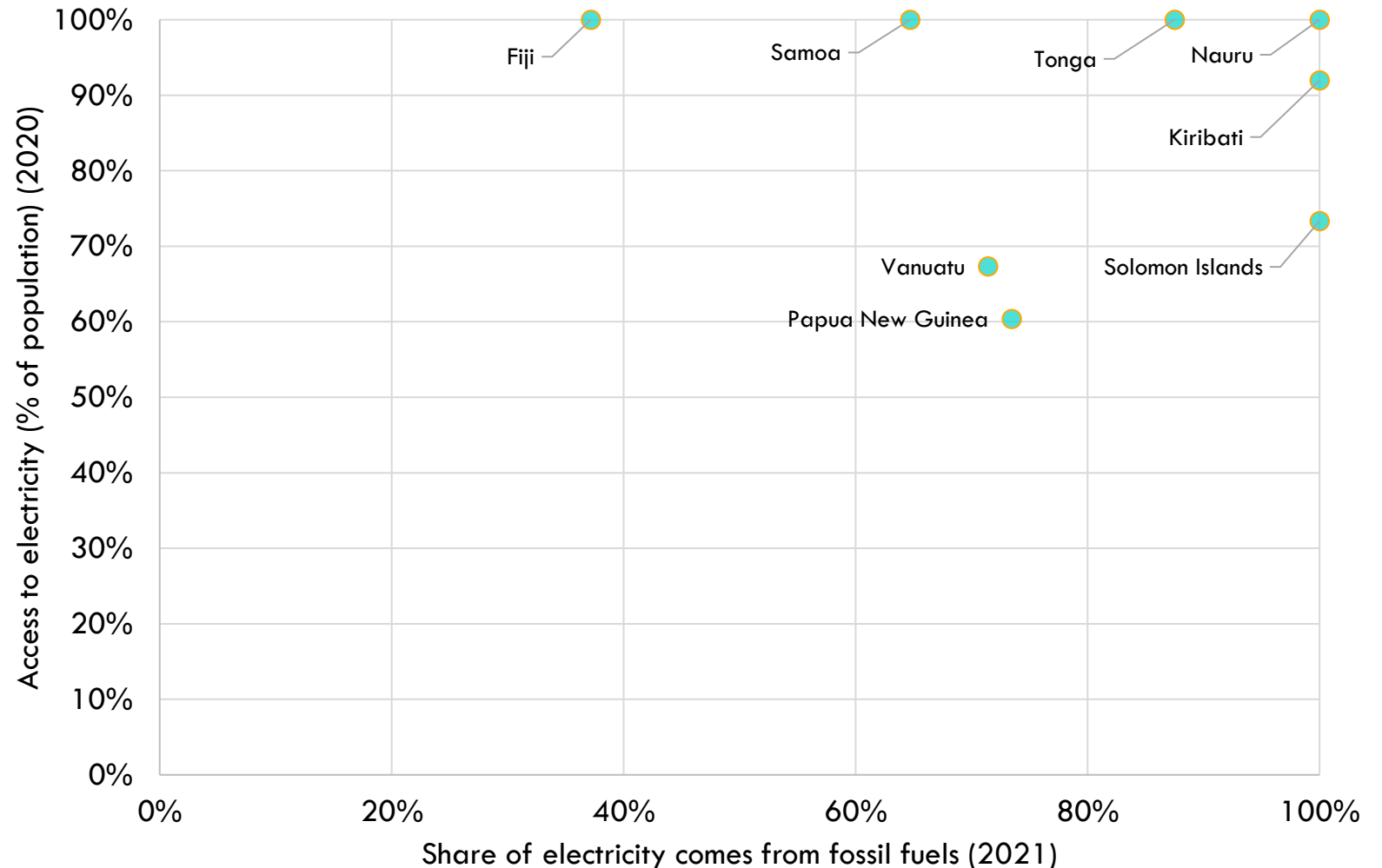


Grid emission factors for electricity (gCO₂/kWh)



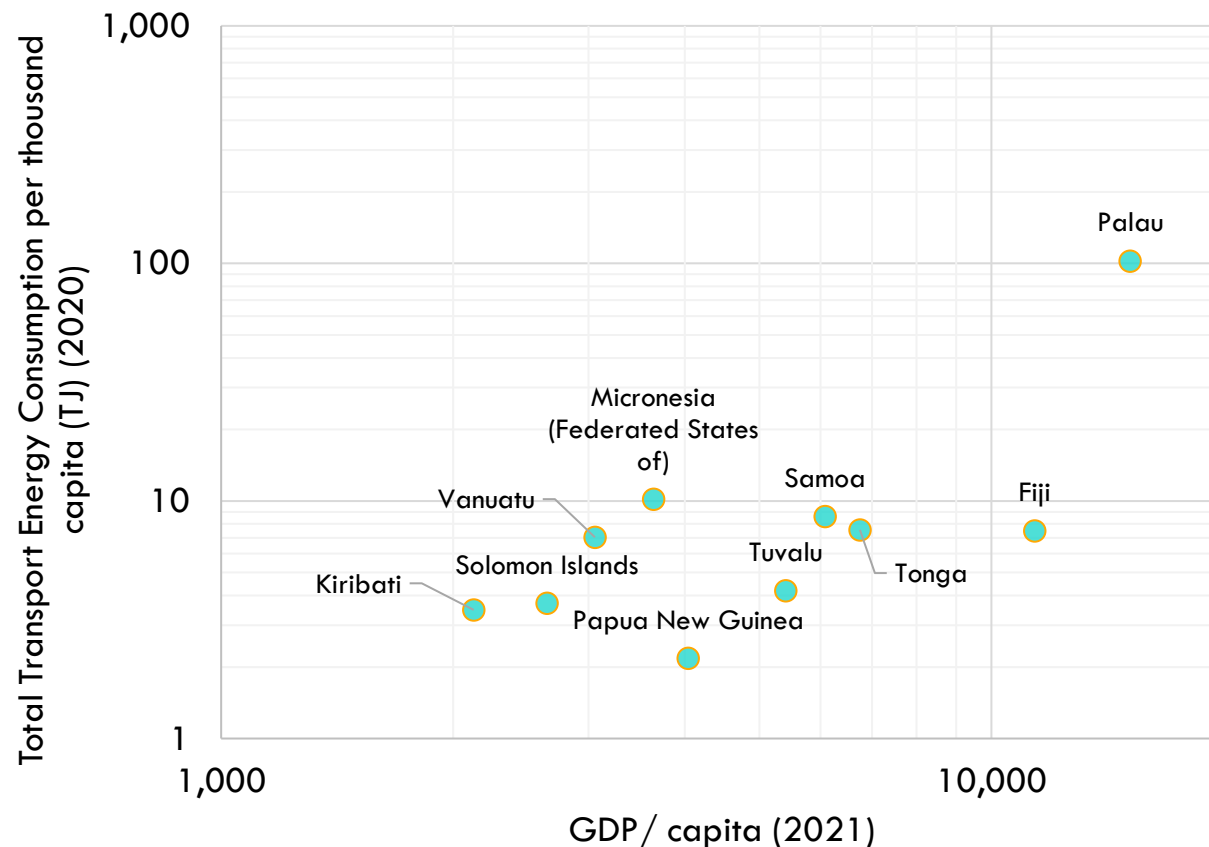
ACCESS TO ELECTRICITY VS. SOURCE OF ELECTRICITY

- Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys and international sources. It contains mainly data from nationally representative household surveys (including national censuses).
- Solomon Islands has 100% of its electricity coming from fossil fuels and as of 2020, about 70% of the population had the access to electricity.



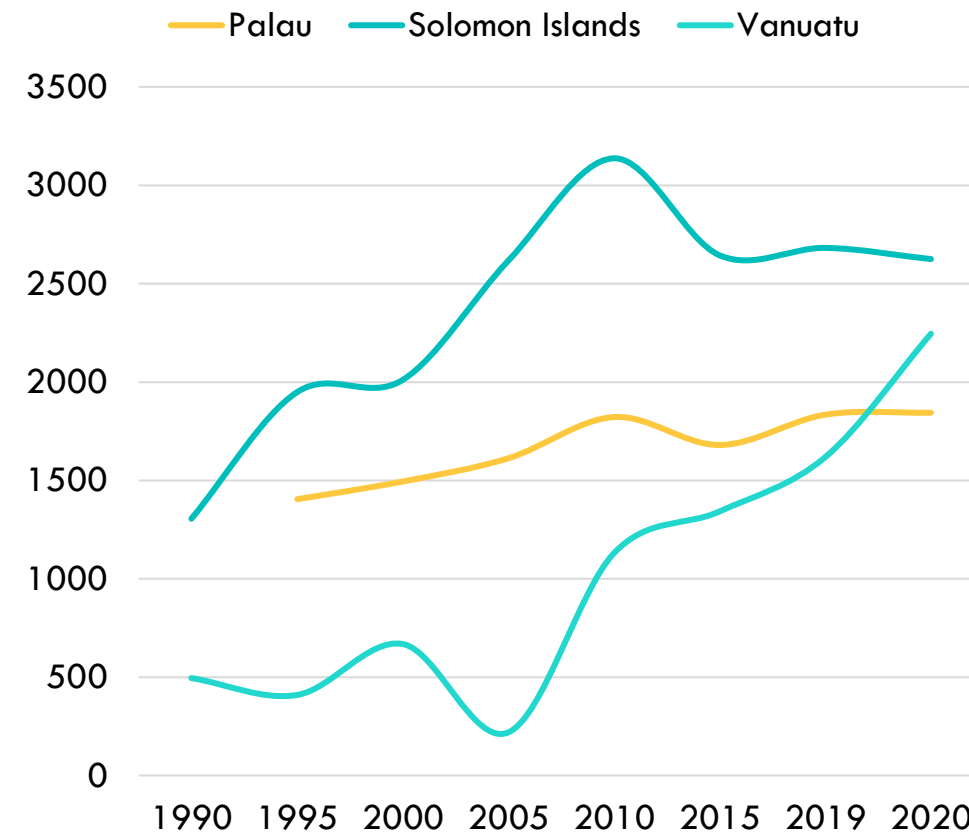
TOTAL TRANSPORT ENERGY CONSUMPTION

Total Transport energy consumption vs. GDP/ capita



- Palau demonstrates highest total transport energy consumption per capita among the Pacific SIDS.

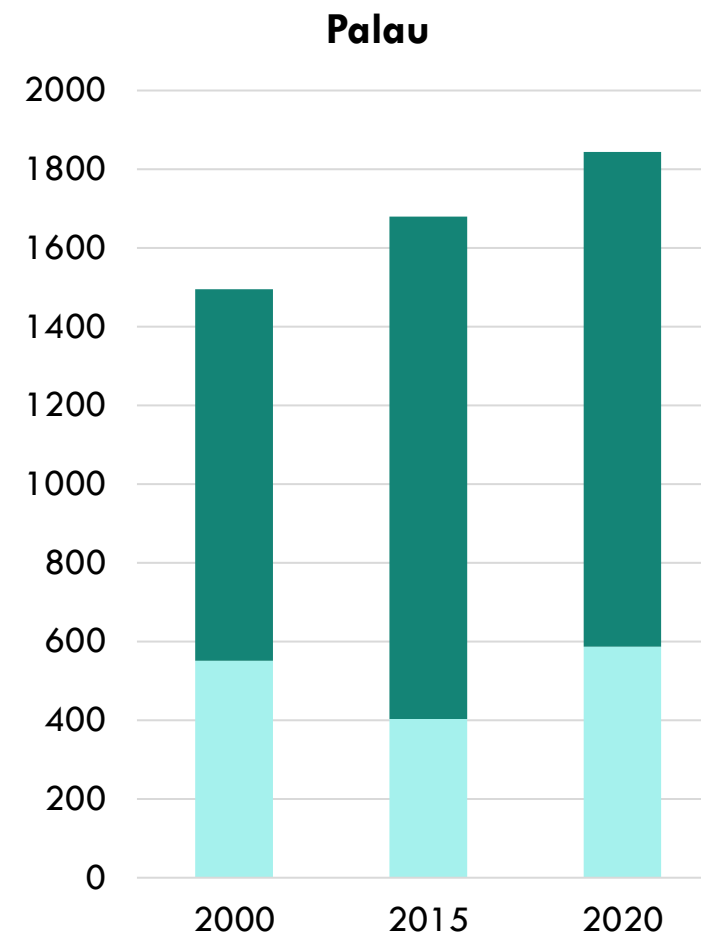
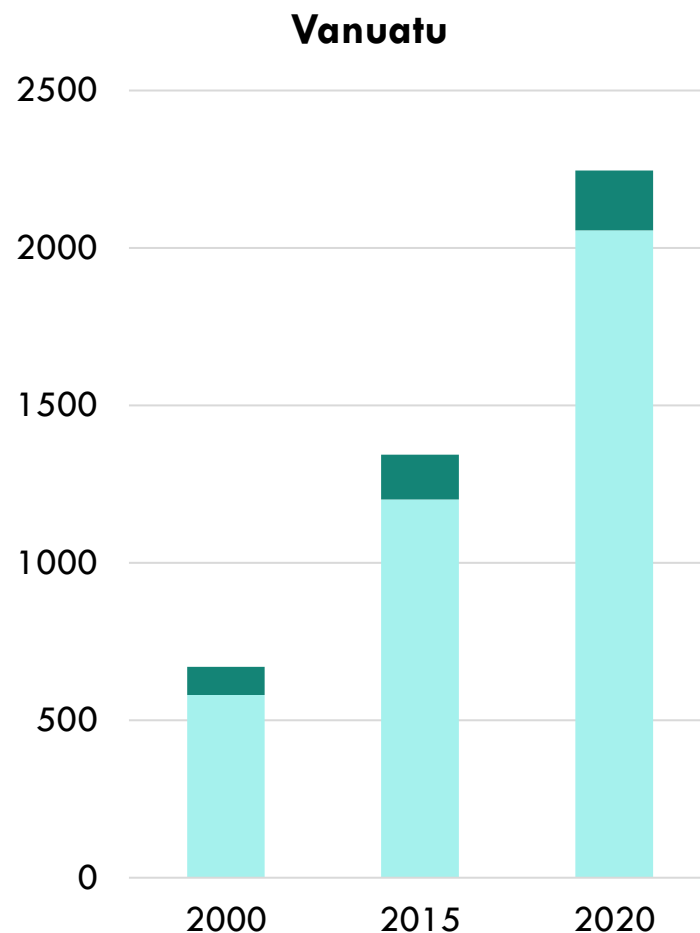
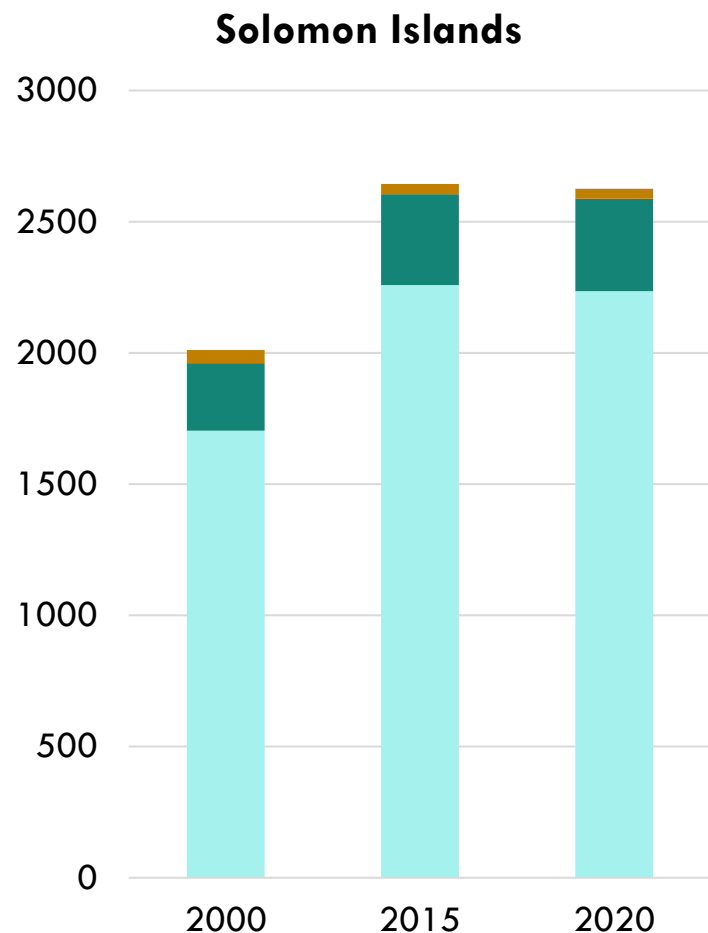
Total Transport Energy Consumption (TJ)



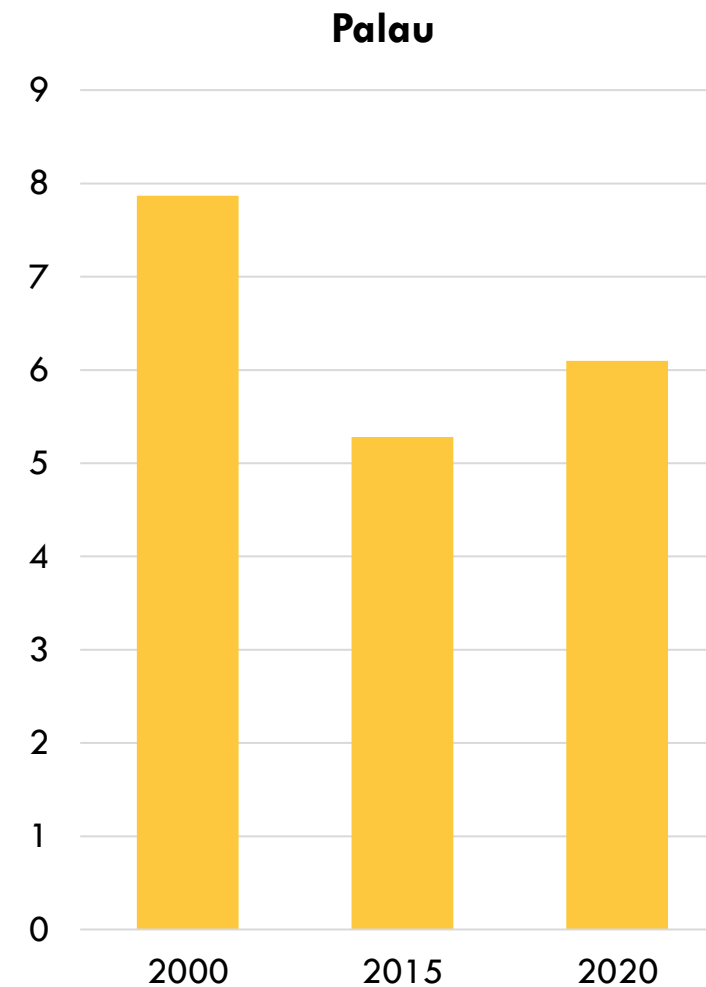
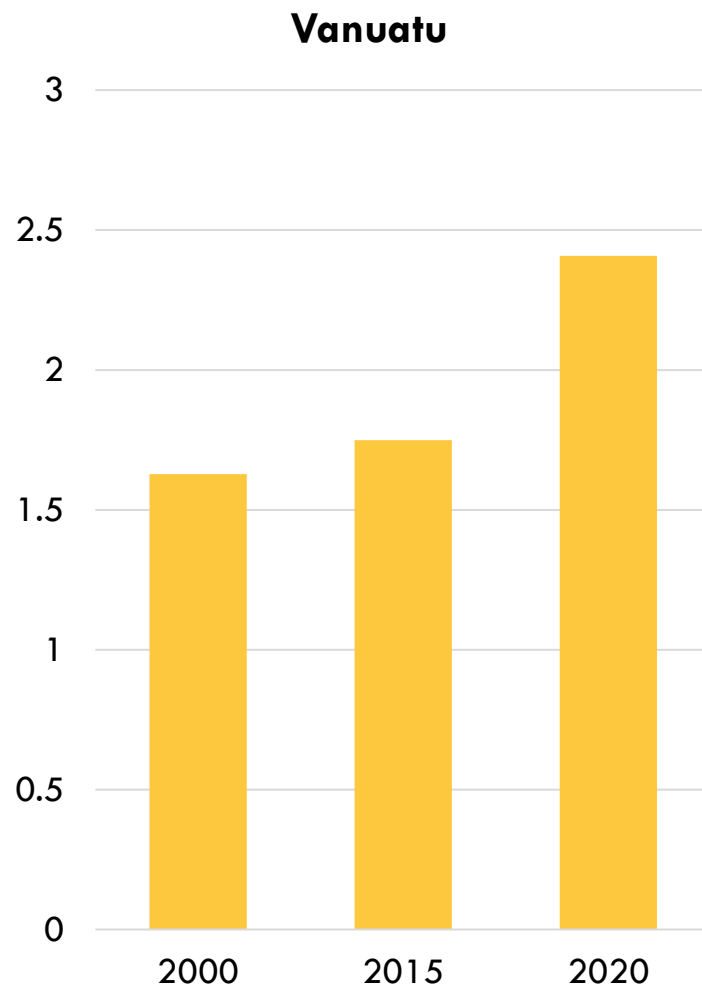
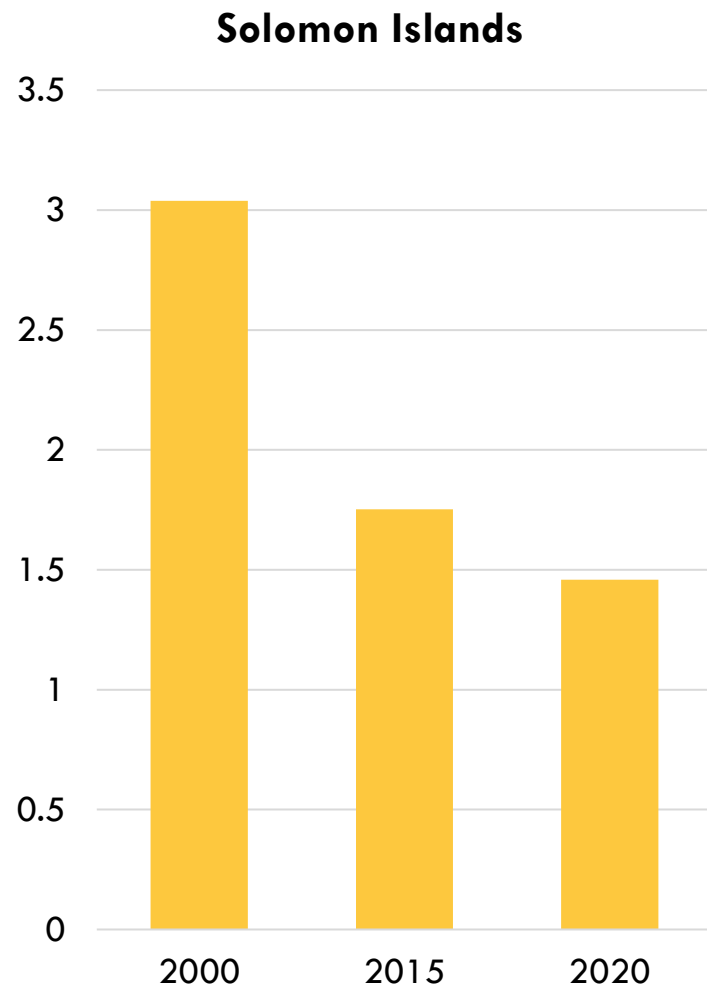
- Vanuatu exhibits rapid acceleration of the total transport energy consumption trends. Palau can be seen to be roughly stagnating.

FINAL ENERGY CONSUMPTION IN TRANSPORT BY MODE (TJ)

■ Road
 ■ Domestic navigation
 ■ Domestic aviation

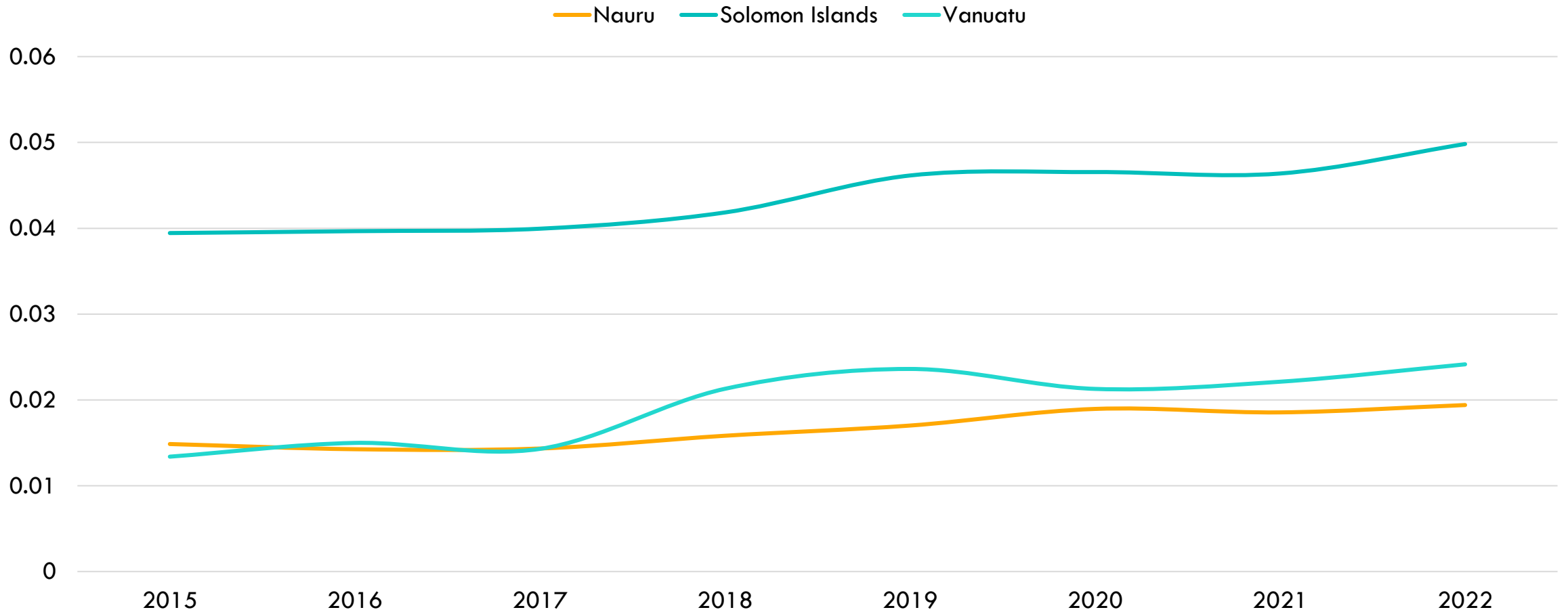


TRANSPORT ENERGY INTENSITY (MJ PER USD)



FOSSIL FUEL SUBSIDIES FOR PETROLEUM

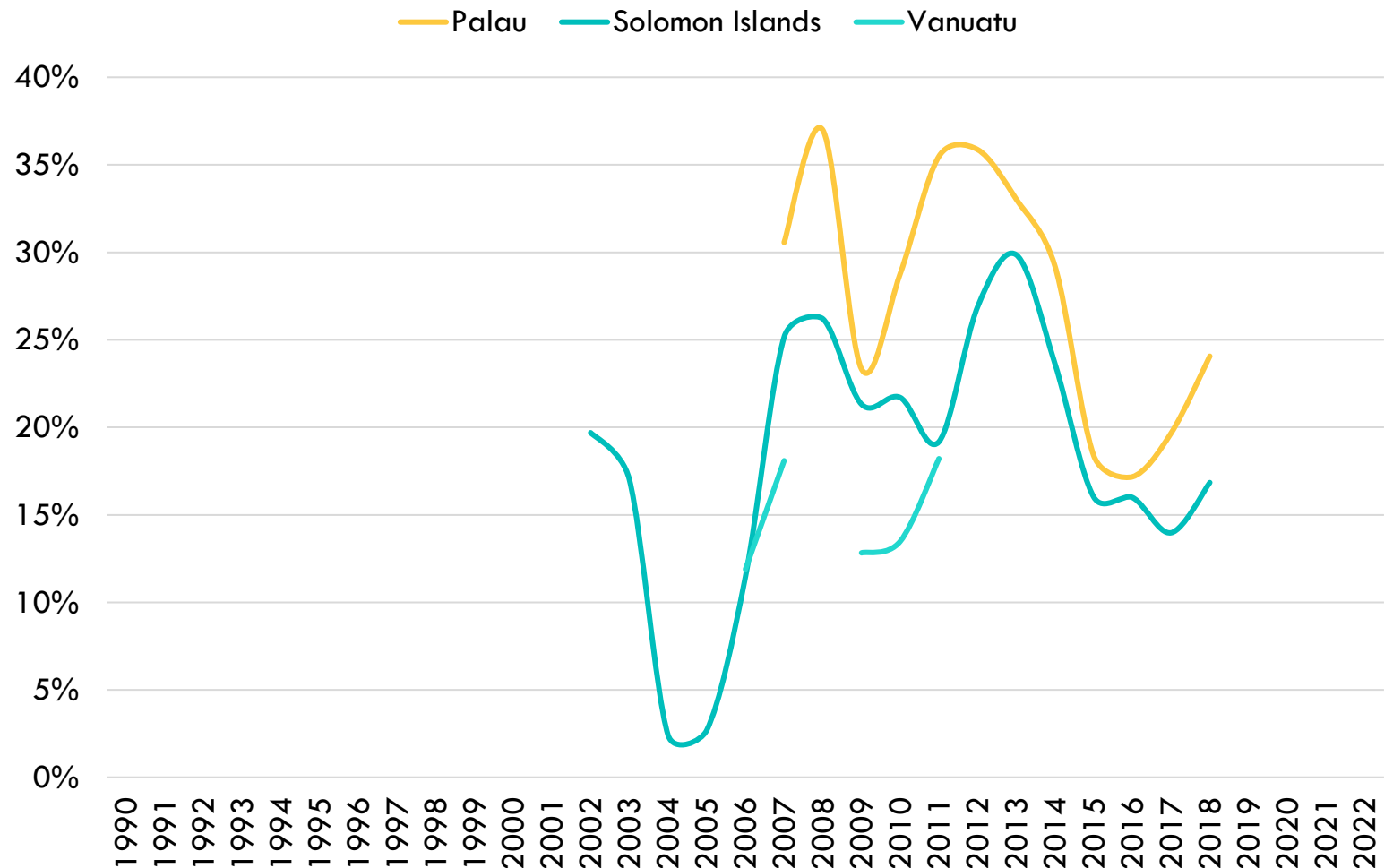
Implicit fossil fuel subsidies (Billion USD (constant 2021))



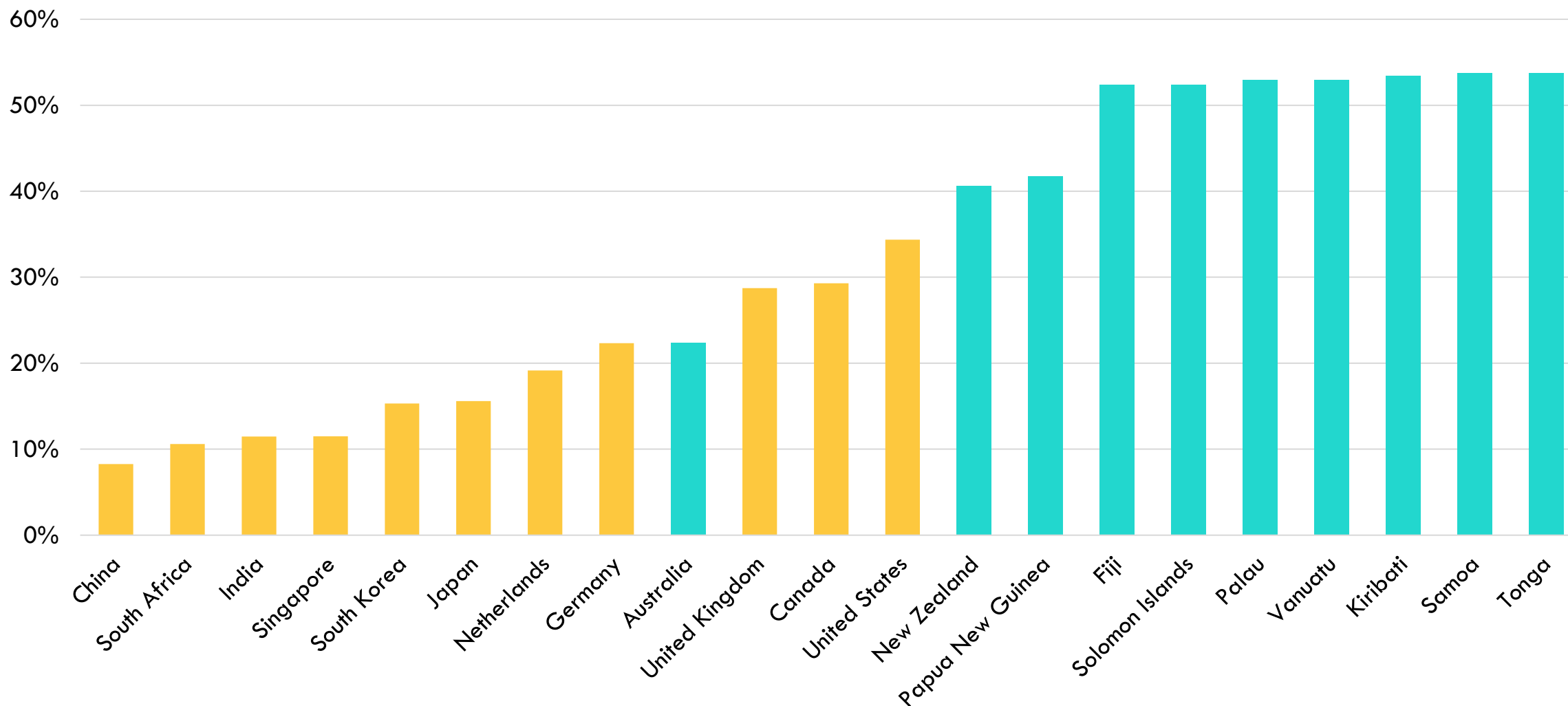
FUEL IMPORTS

- Fuels comprise the commodities in SITC section 3 (mineral fuels, lubricants and related materials). The indicator provides fuel import as a share of total merchandise imports.
- The share has dropped roughly between 2013 to 2017 for Palau and the Solomon Islands, but is showing an increasing trend since then.

Fuel imports (% of merchandise imports)

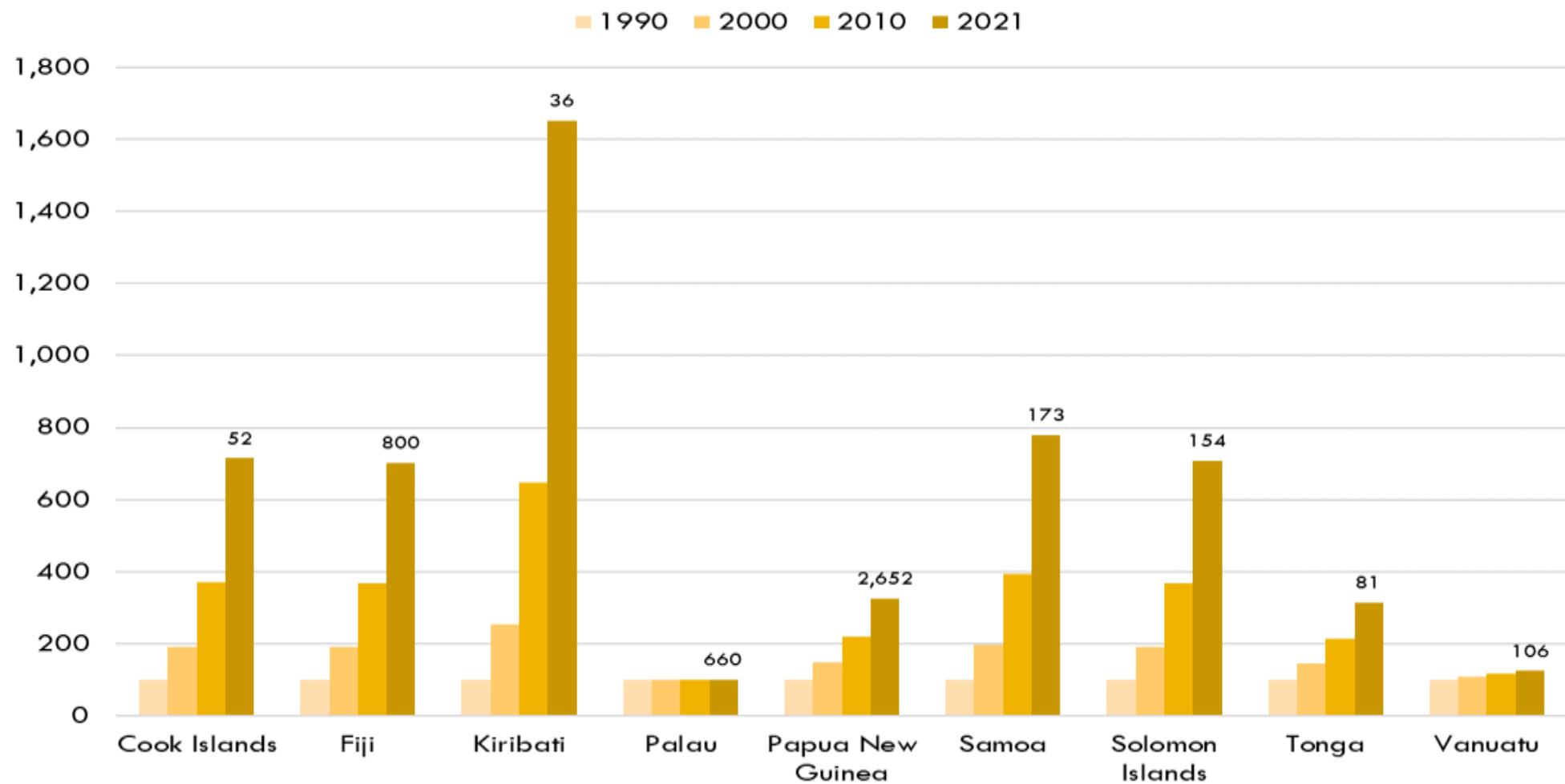


SHARE OF FOSSIL TRANSPORT CO2 EMISSIONS IN TOTAL CO2 EMISSIONS



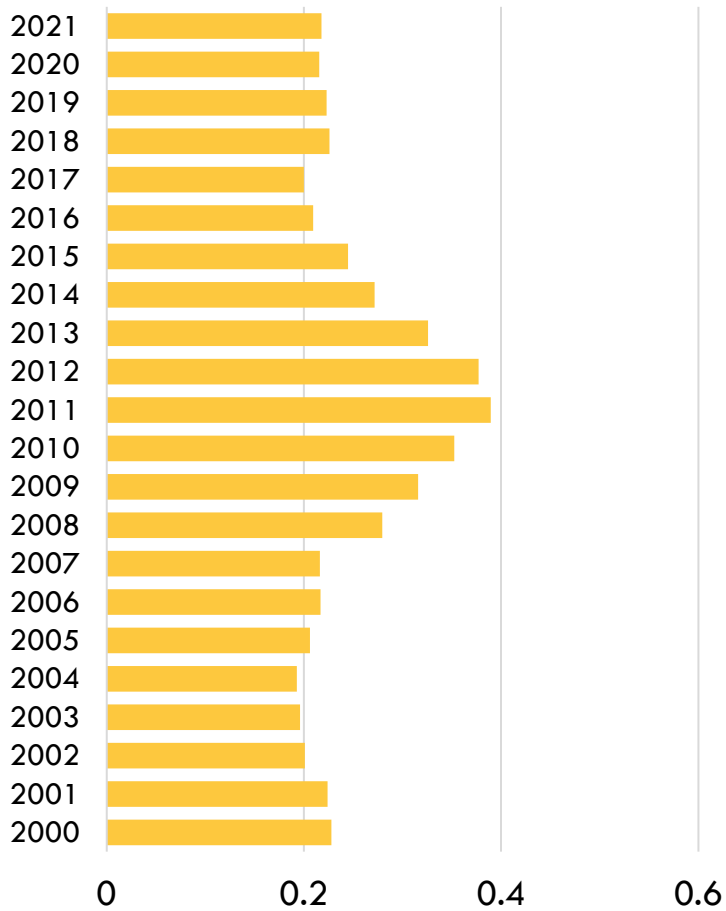
FOSSIL TRANSPORT CO2 EMISSIONS

Fossil Transport CO2 emissions (1990 = 100) (Data labels are values in thousand tonnes)

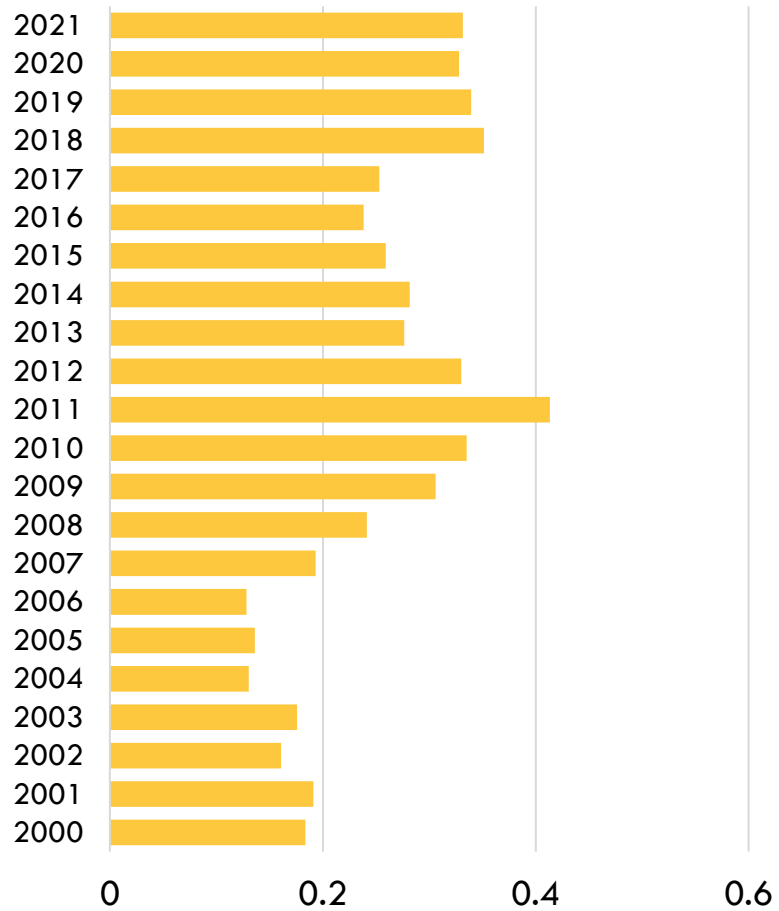


FOSSIL TRANSPORT CO2 EMISSIONS PER CAPITA (TONNES PER CAPITA)

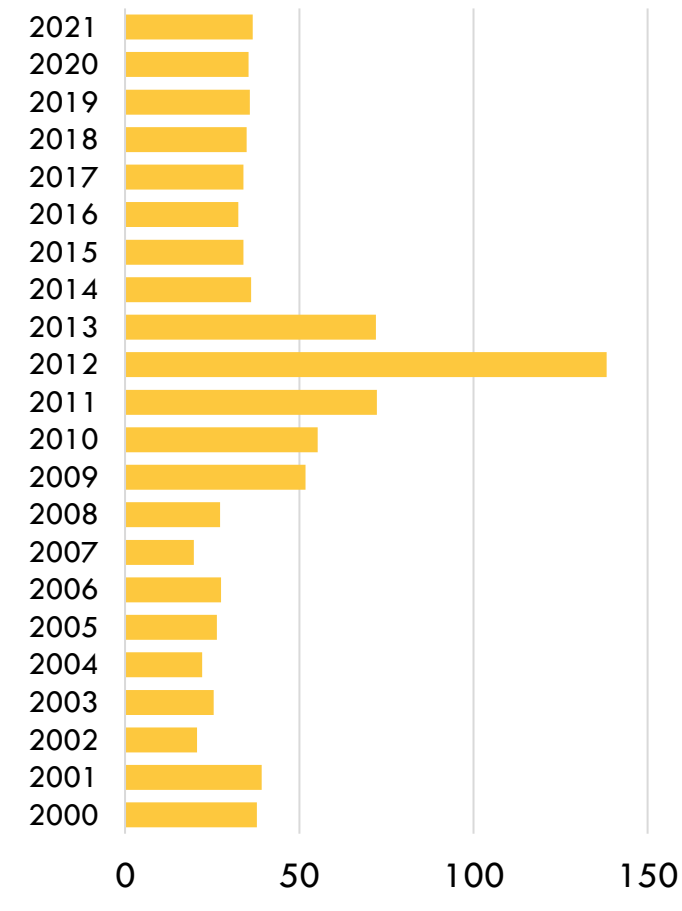
Solomon Islands



Vanuatu



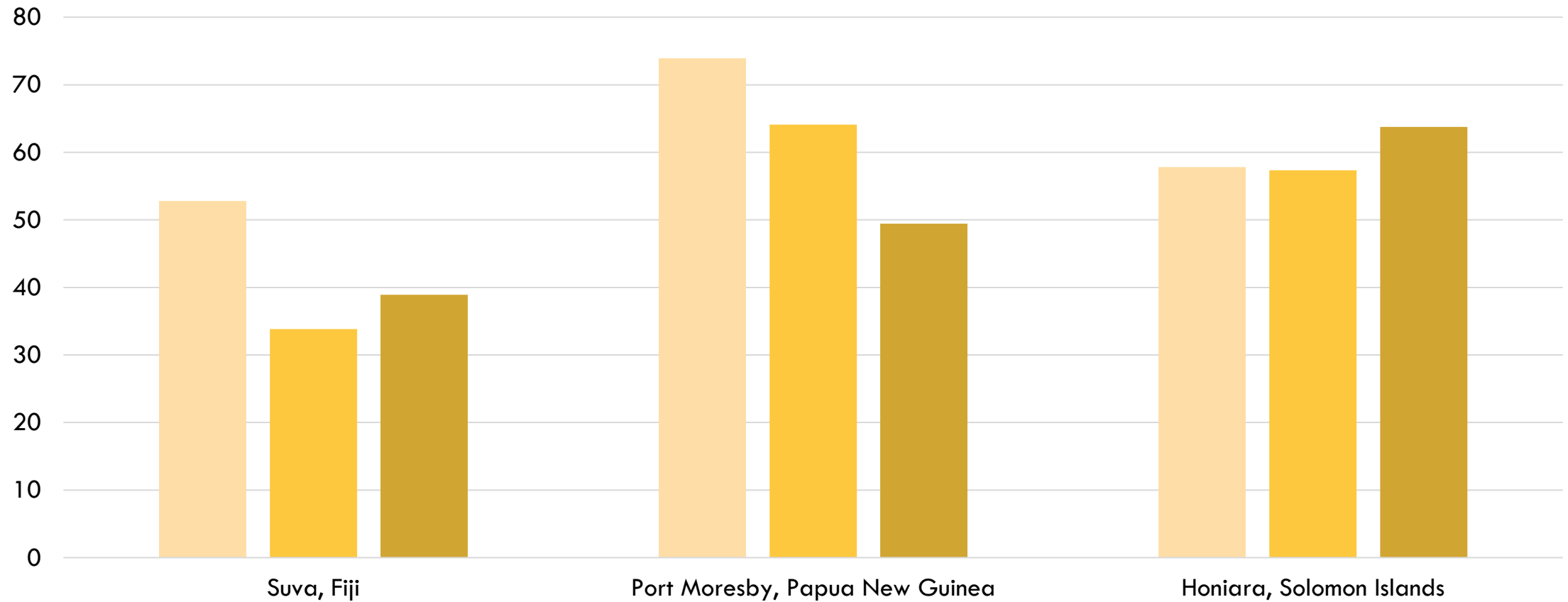
Palau



URBAN TRANSPORT EMISSIONS

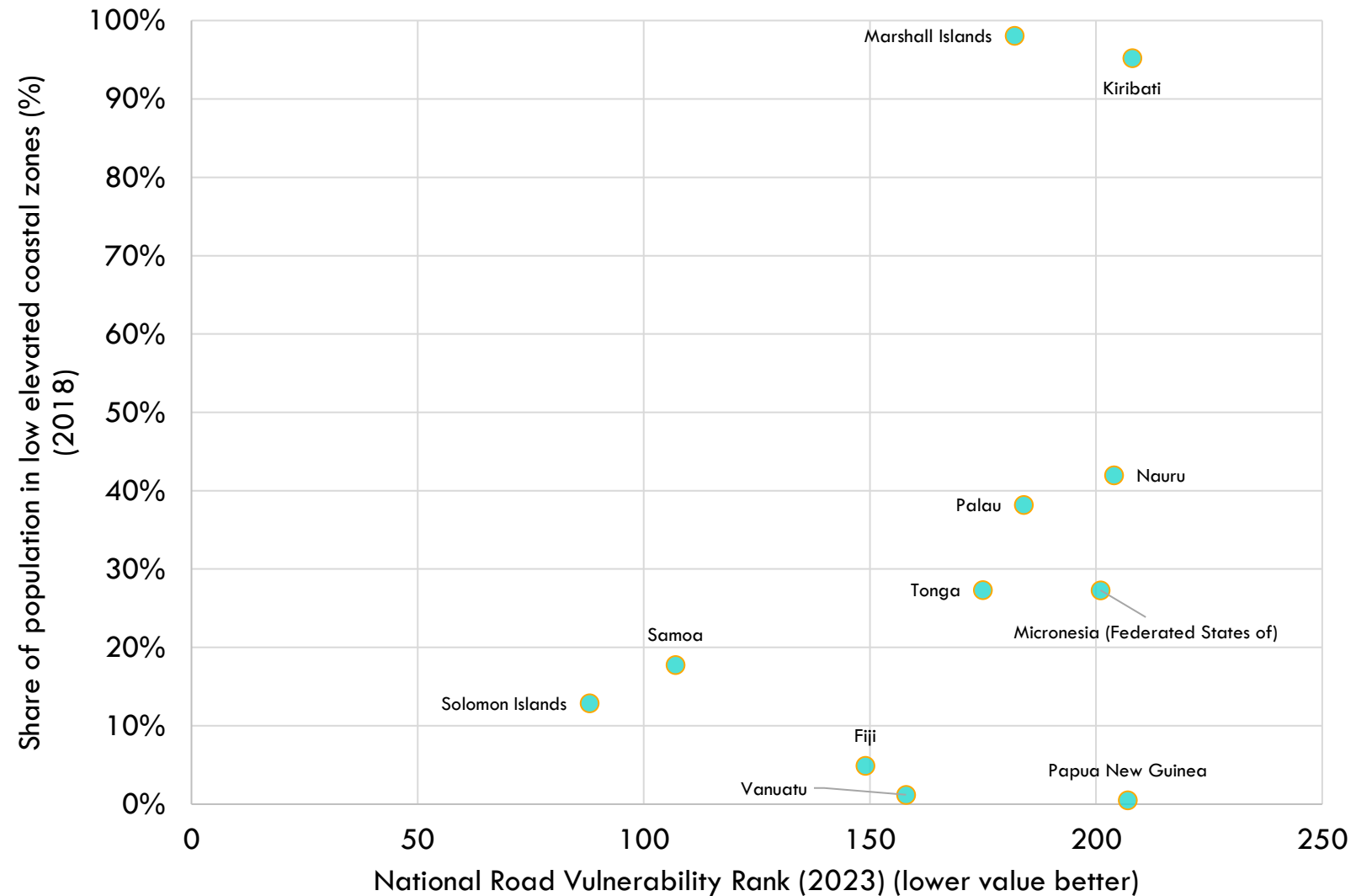
Transport CO2 emissions per capita (kg/ year/ capita)

1975 1990 2000



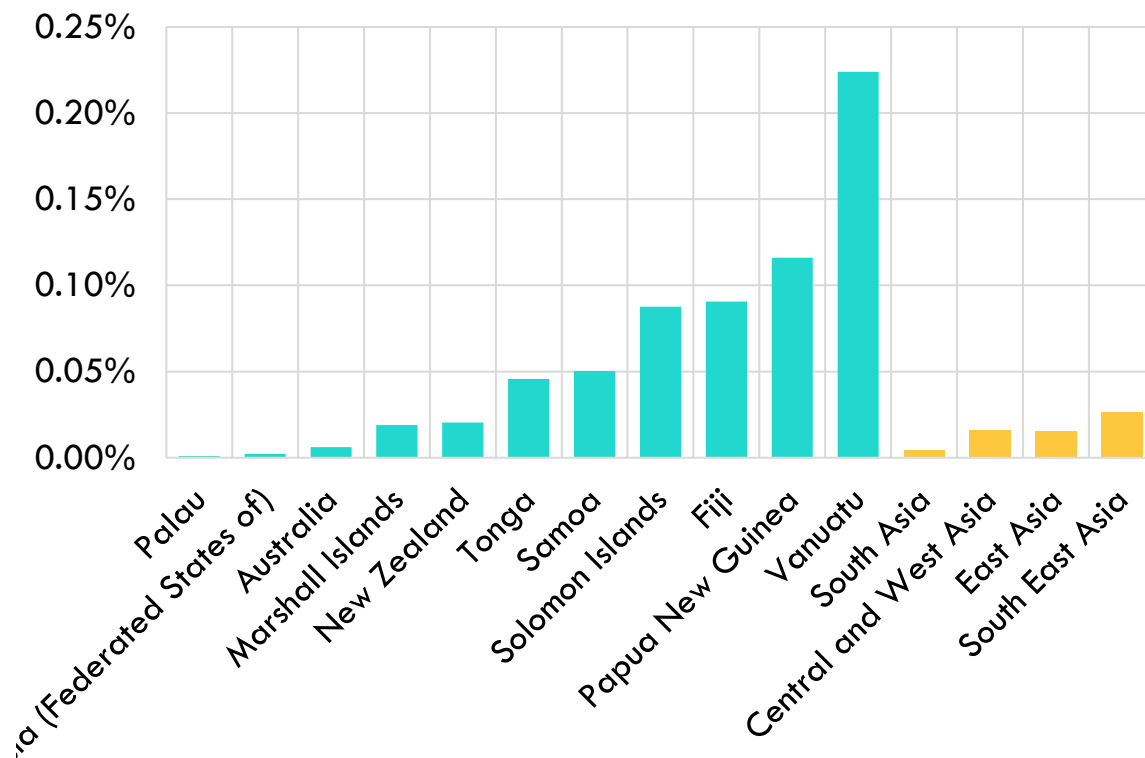
CLIMATE CHANGE VULNERABILITY

- For NRVI, natural disasters are simulated on random and cluster of country road segments. The Index indicates how much of the trips are potentially disrupted due to the missing segments.
- Marshall Islands and Kiribati stand extremely vulnerable with lower resistance of the road network and higher share of population in 5m proximity/ low elevated coastal zones.



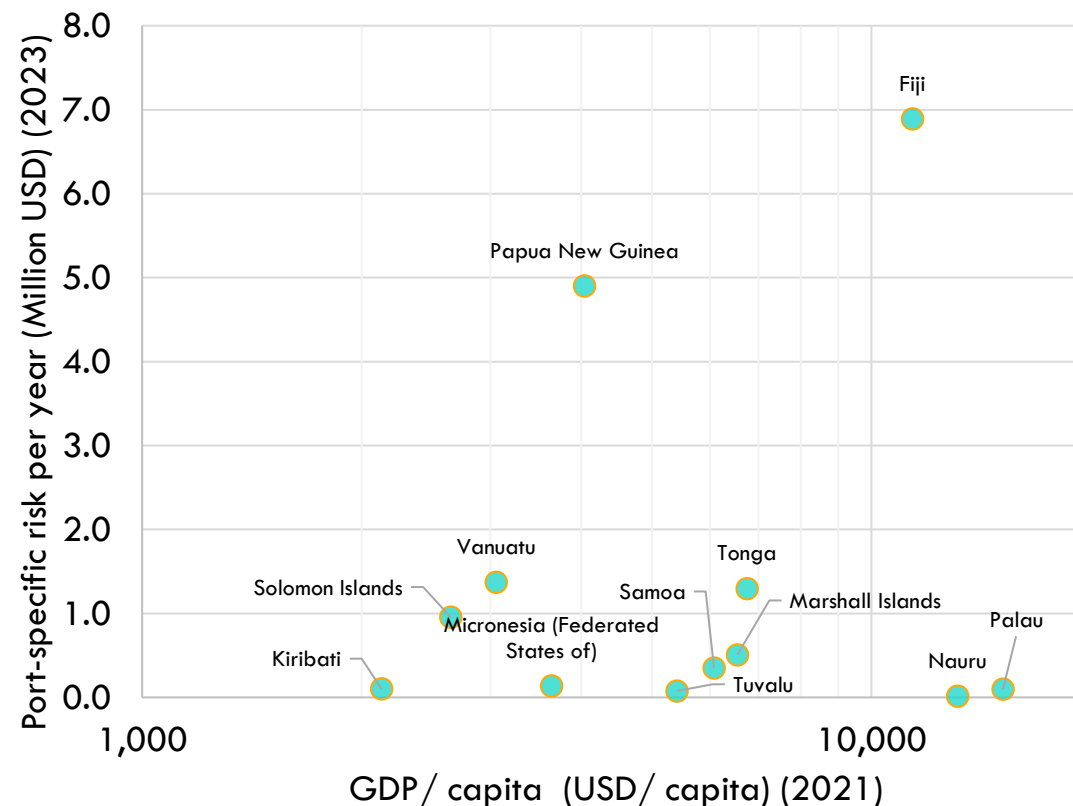
MULTI-HAZARD EXPECTED ANNUAL DAMAGES TO TRANSPORT INFRASTRUCTURE, SHARE OF GDP, 2019

Multi-hazard expected annual damages to transport infrastructure, share of GDP, 2019



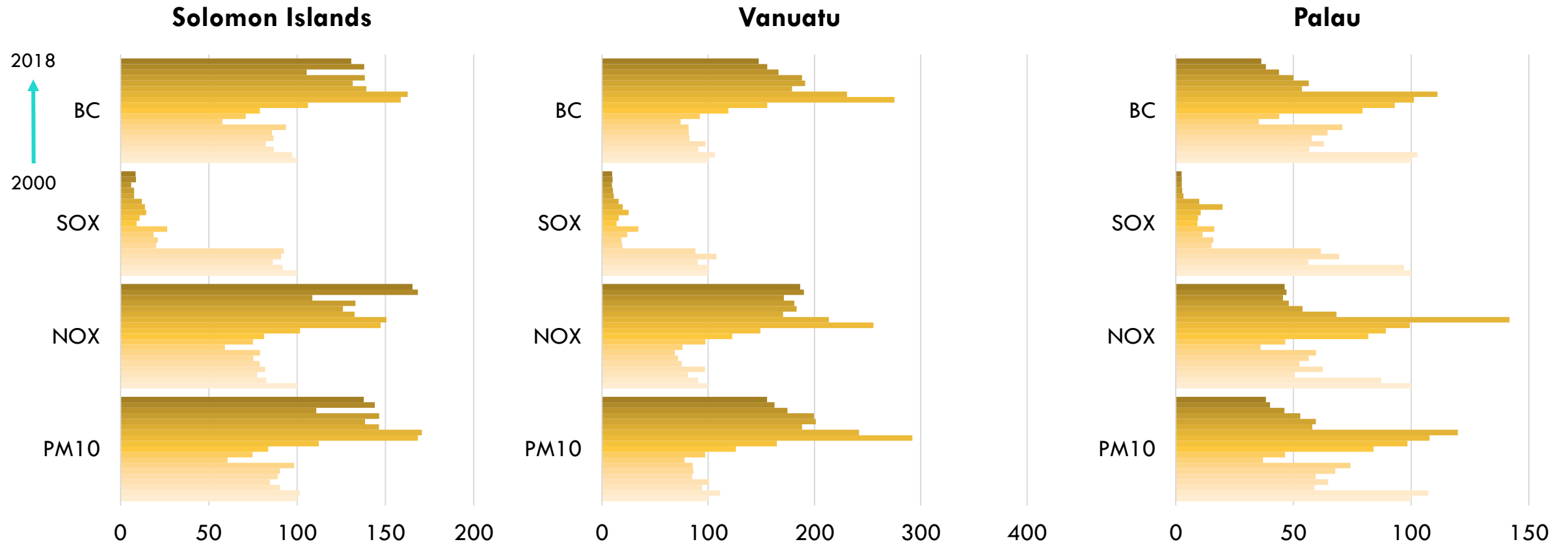
- Vanuatu poses highest multi hazard risk of damages to the transport infrastructure as a share of GDP.

Port specific risks



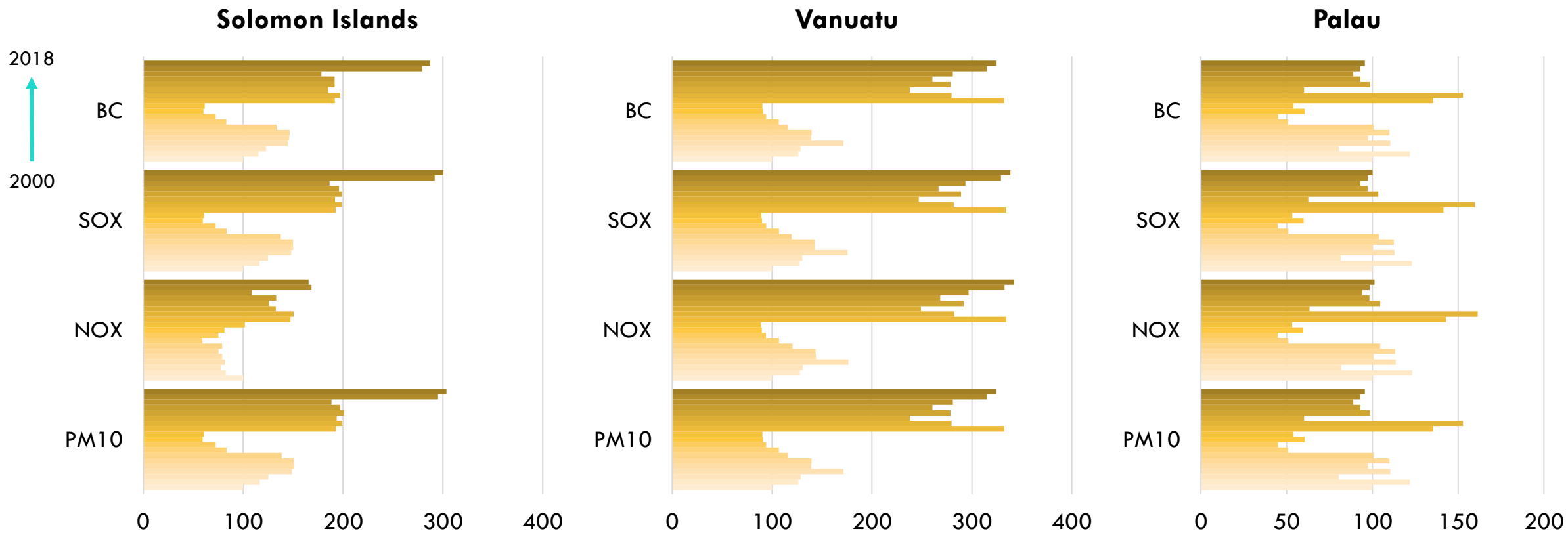
- Fiji poses highest port specific risk of damages while PNG also does so at lower GDP/capita levels.

ROAD TRANSPORT AIR POLLUTANT EMISSIONS (2000=100)



- Broadly between the period of 2000 to 2018, all the air pollutant emissions are on the decline except for NOx in the Solomon Islands.

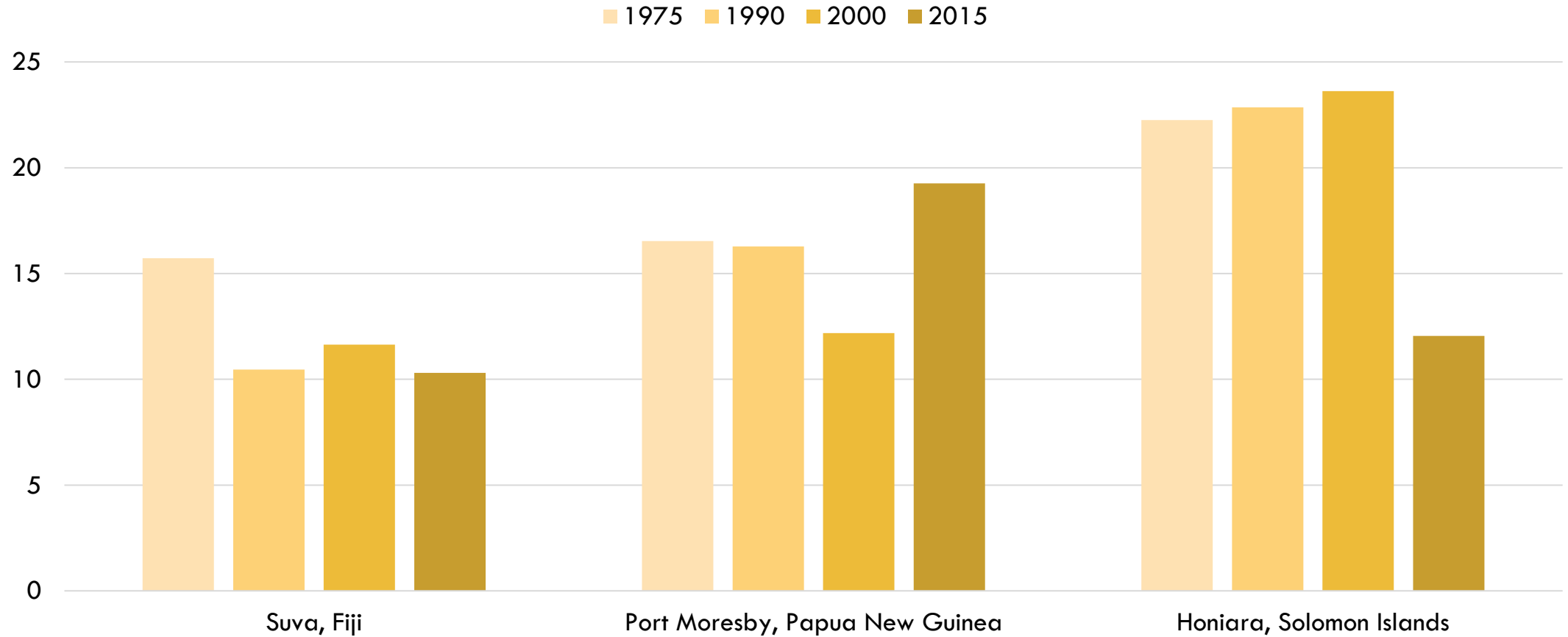
DOMESTIC NAVIGATION AIR POLLUTANT EMISSIONS (2000=100)



- Domestic Navigation subsector is showing slower progress compared to the road subsector.

URBAN TRANSPORT EMISSIONS

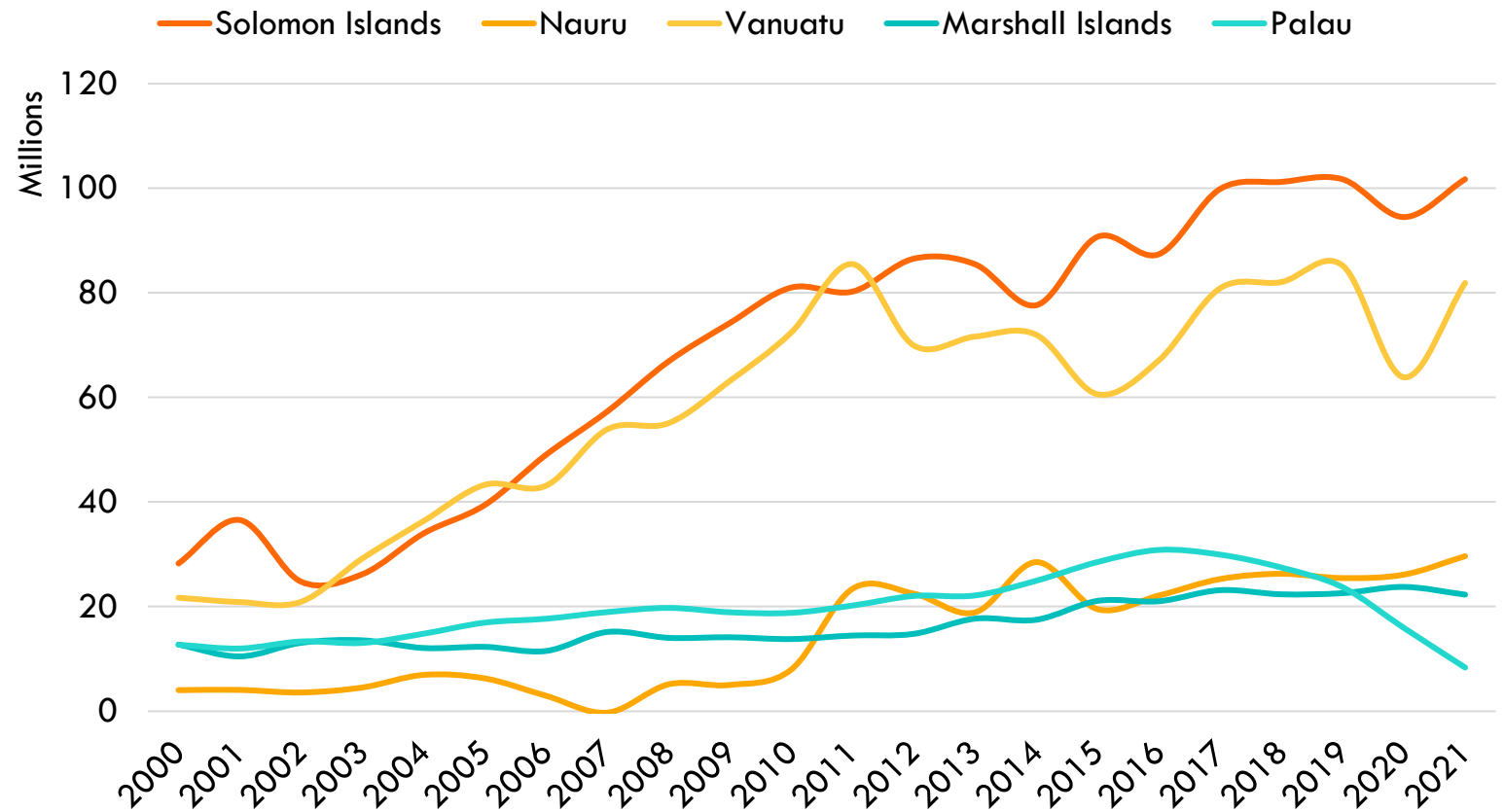
Transport pm2.5 emissions per capita (grams/ year/ capita)



GROSS VALUE ADDED

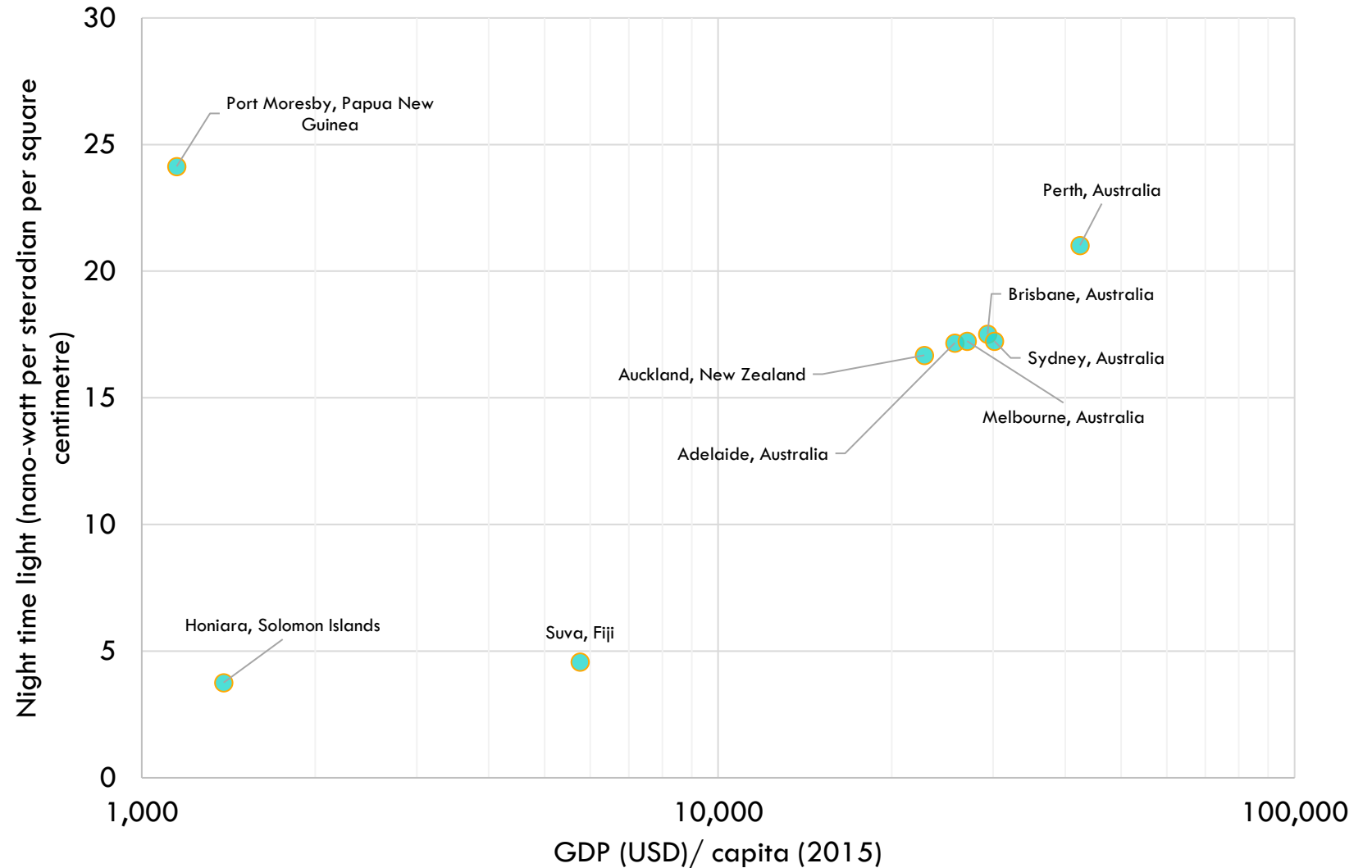
- The Gross Value Added by the transport sector refers to the economic contribution made by the transportation industry to the Gross Domestic Product (GDP) of a country. This includes the value added by activities such as the movement of goods and passengers by road, rail, air, and sea, as well as related services like logistics and transportation infrastructure.
- The GVA by the transport sector steeply increased for the Solomon Islands and Vanuatu between the period 2003 and 2011.
- For Palau it is recently dropping.
- Nauru and the Marshall Islands are stagnating.

**Gross value added by transport, storage, and communication
(USD, current)**



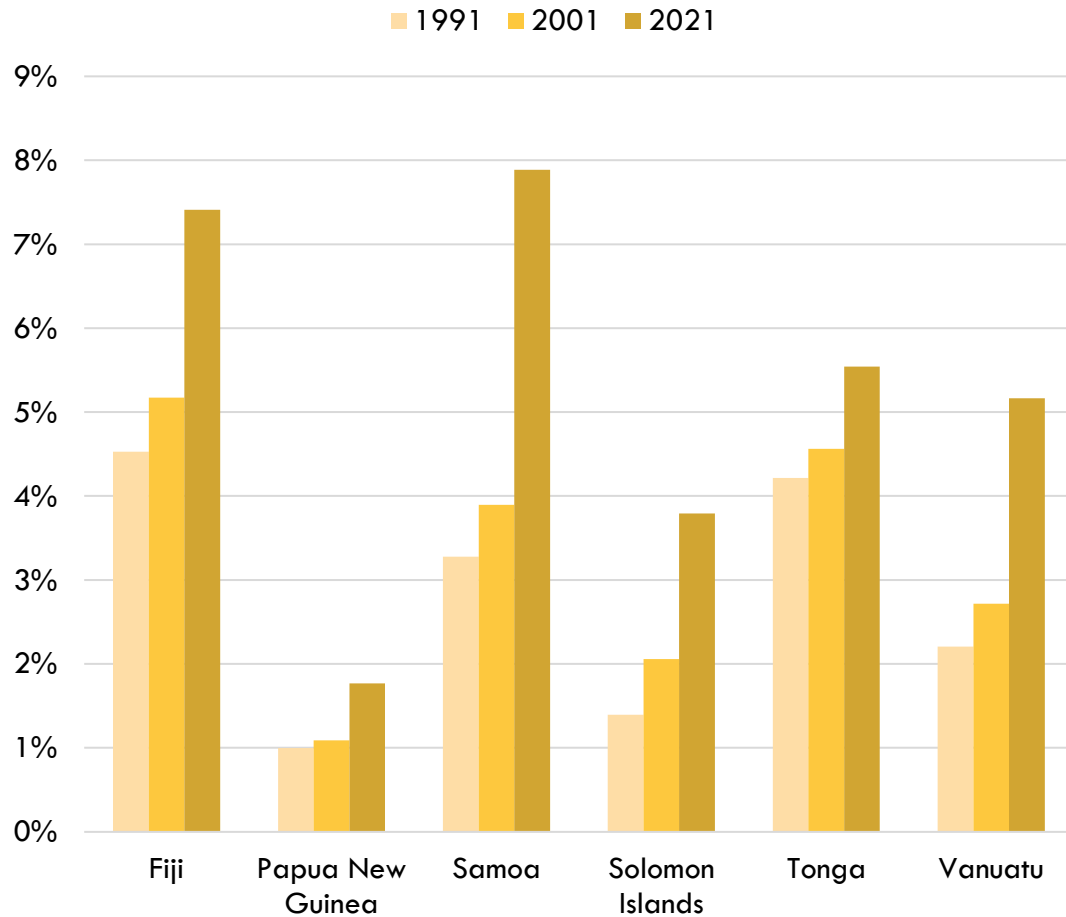
NIGHT TIME LIGHT ANALYSIS

- Nighttime light analysis is a technique that involves studying satellite imagery of Earth at night to analyze the patterns and intensity of artificial lights.
- It reflects the urbanization trends, potentials of transport hubs, traffic and movement patterns etc.
- The city of Port Moresby in PNG compares to the cities in the Australia and New Zealand at much lower GDP/ capita levels.

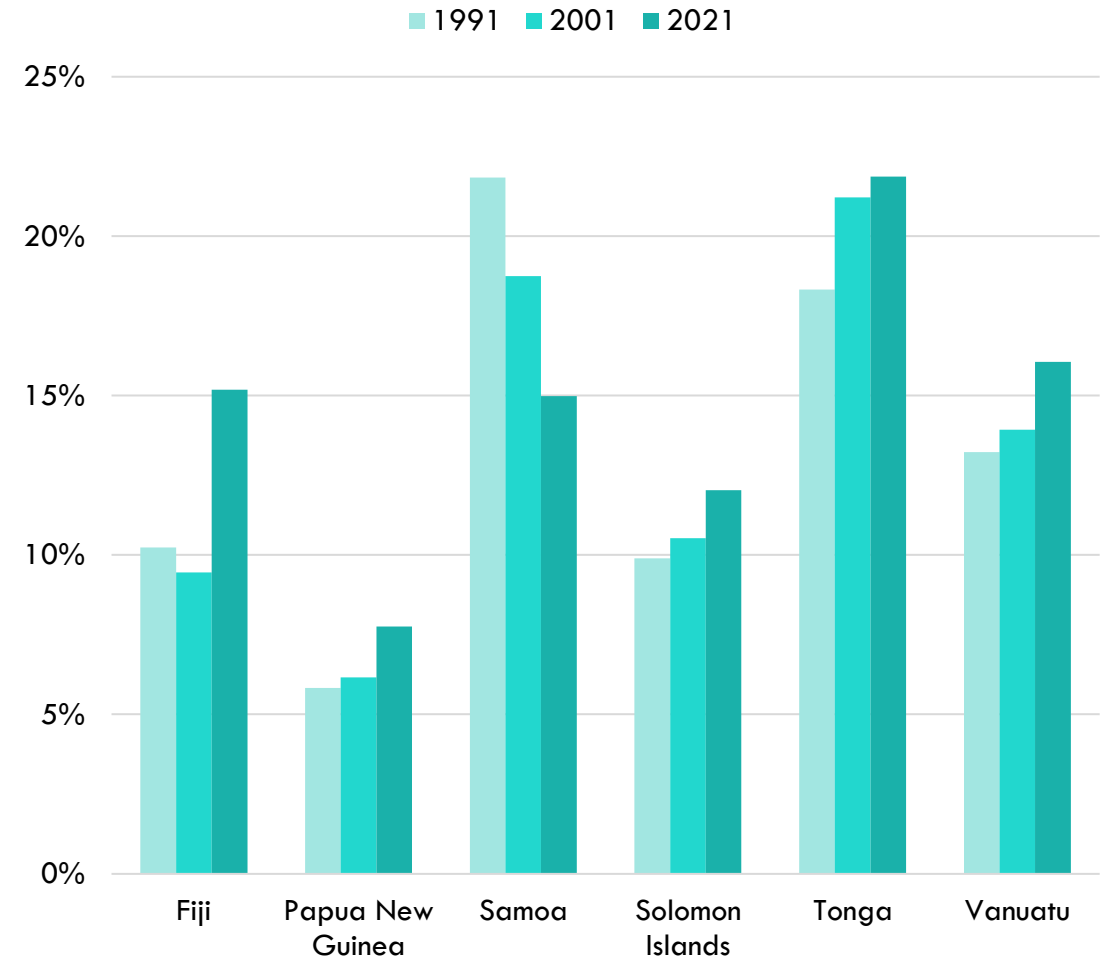


TRANSPORT EMPLOYMENT

Transport Sector Employment share in Total Employment



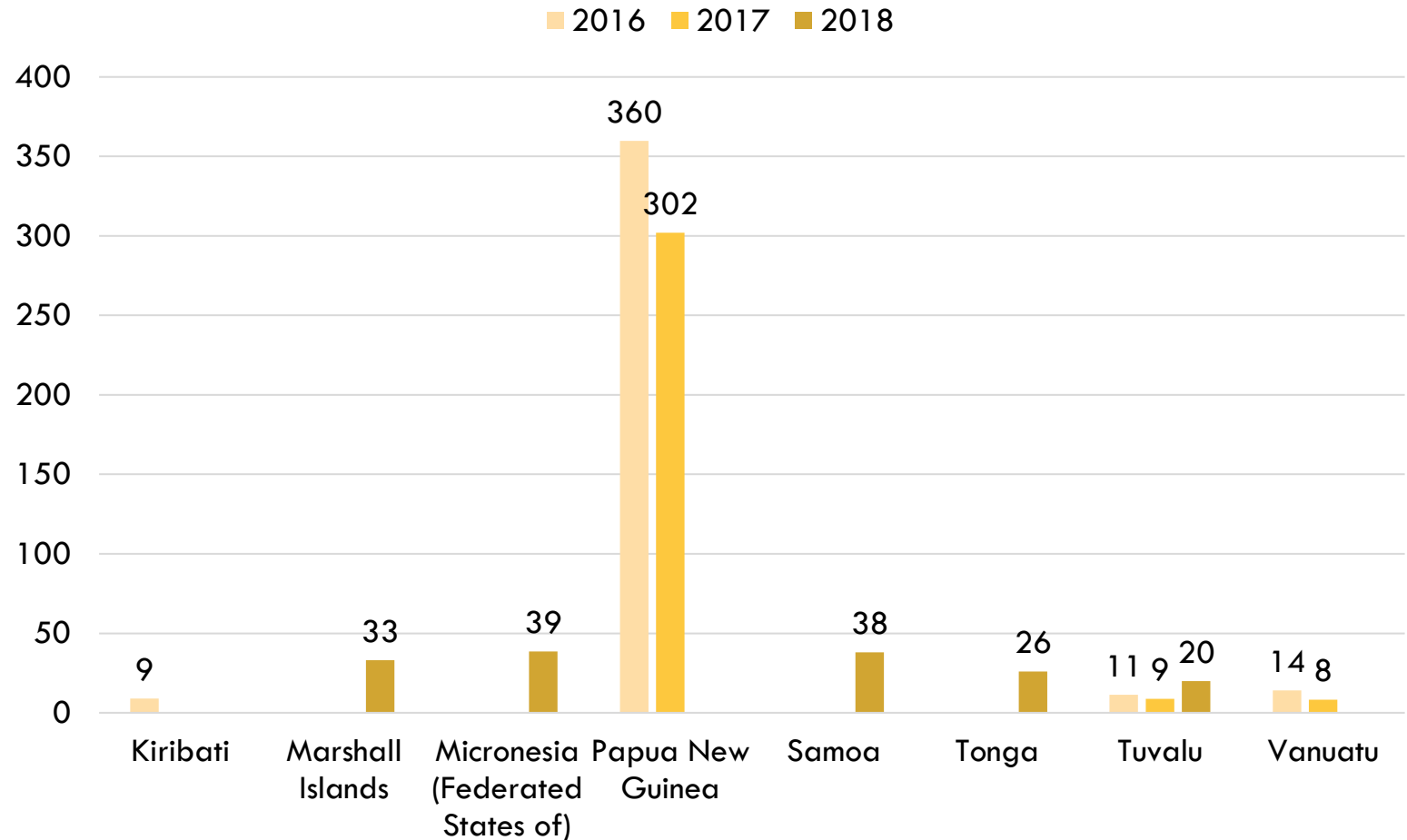
Workers in transport who are female (percentage)



MDB DEVELOPMENT ASSISTANCE FOR TRANSPORT

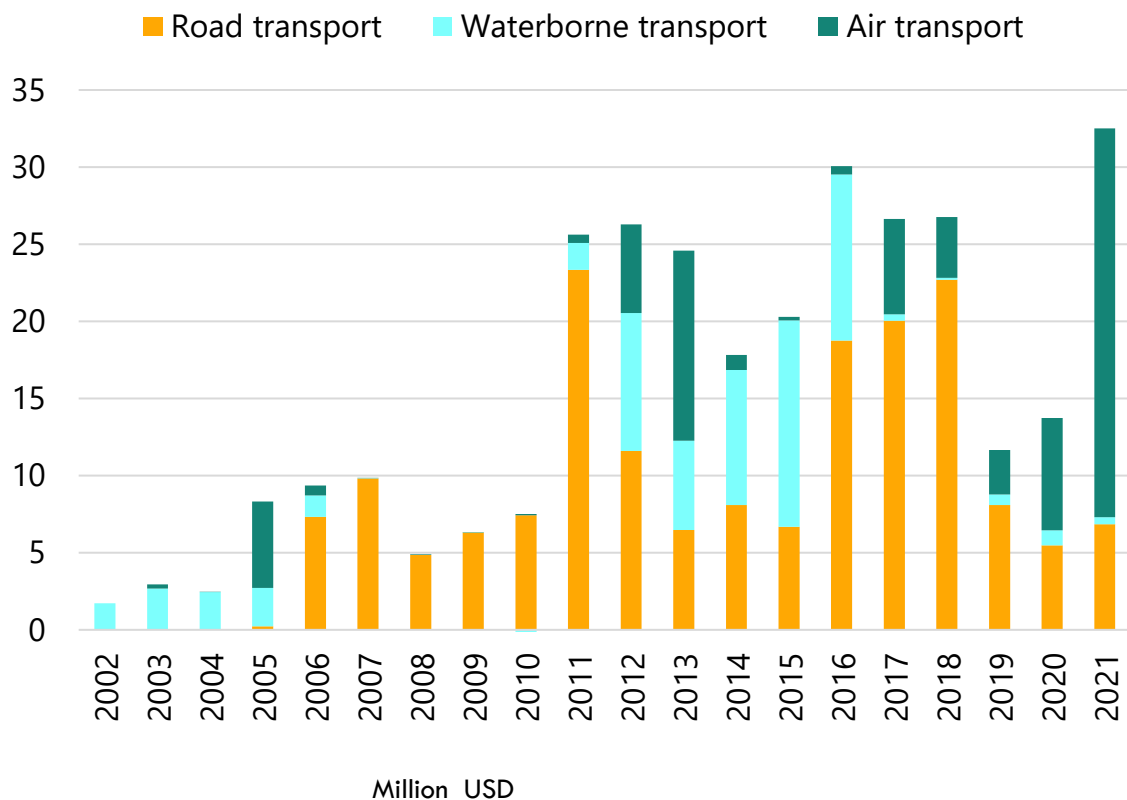
- The data includes loans and grants for transport in developing countries from African Development Bank, Asian Development Bank, CAF - Development Bank of Latin America, European Bank for Reconstruction and Development, European Investment Bank, Inter-American Development Bank, Islamic Development Bank, World Bank.

MDB development assistance for Transport (mln. USD)

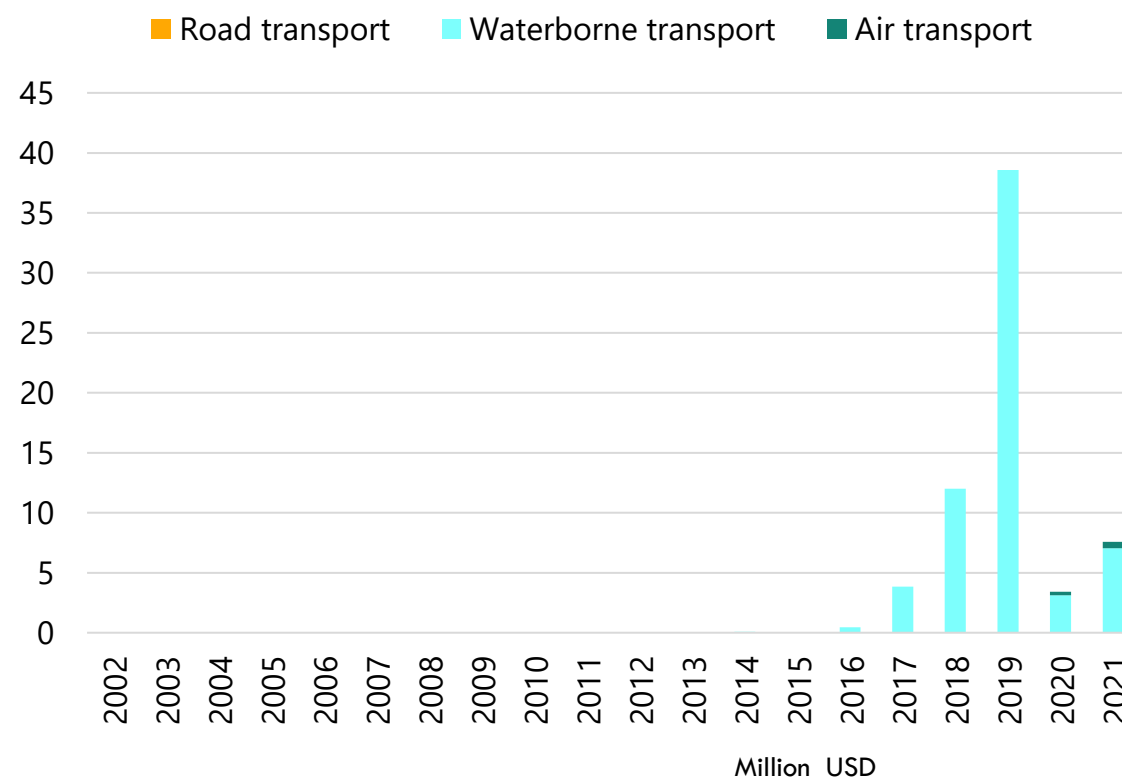


OFFICIAL DEVELOPMENT ASSISTANCE

Solomon Islands

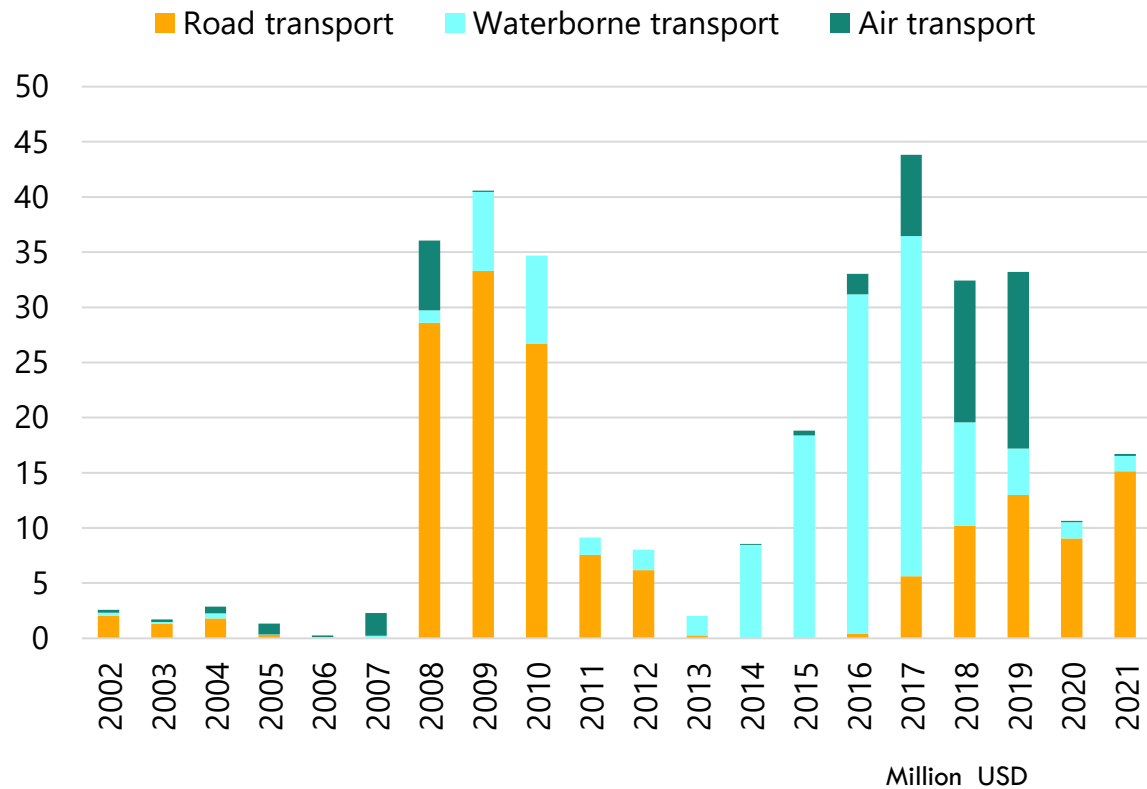


Nauru

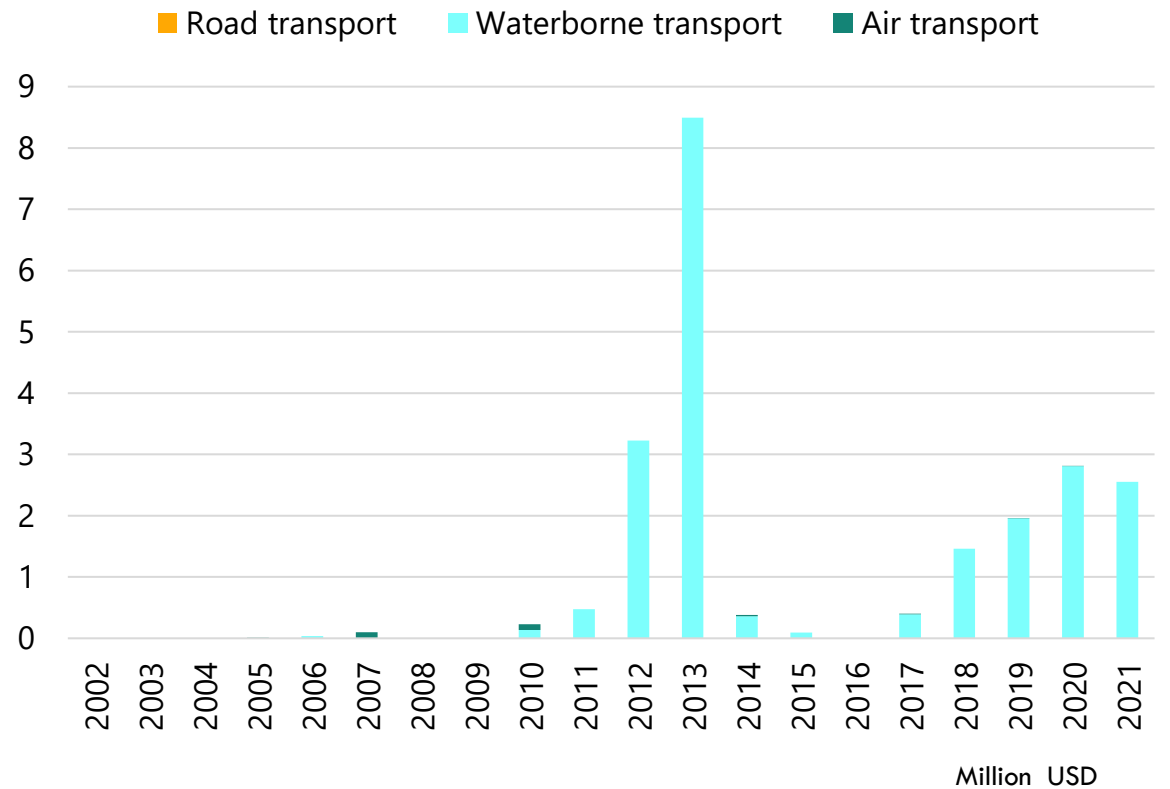


OFFICIAL DEVELOPMENT ASSISTANCE

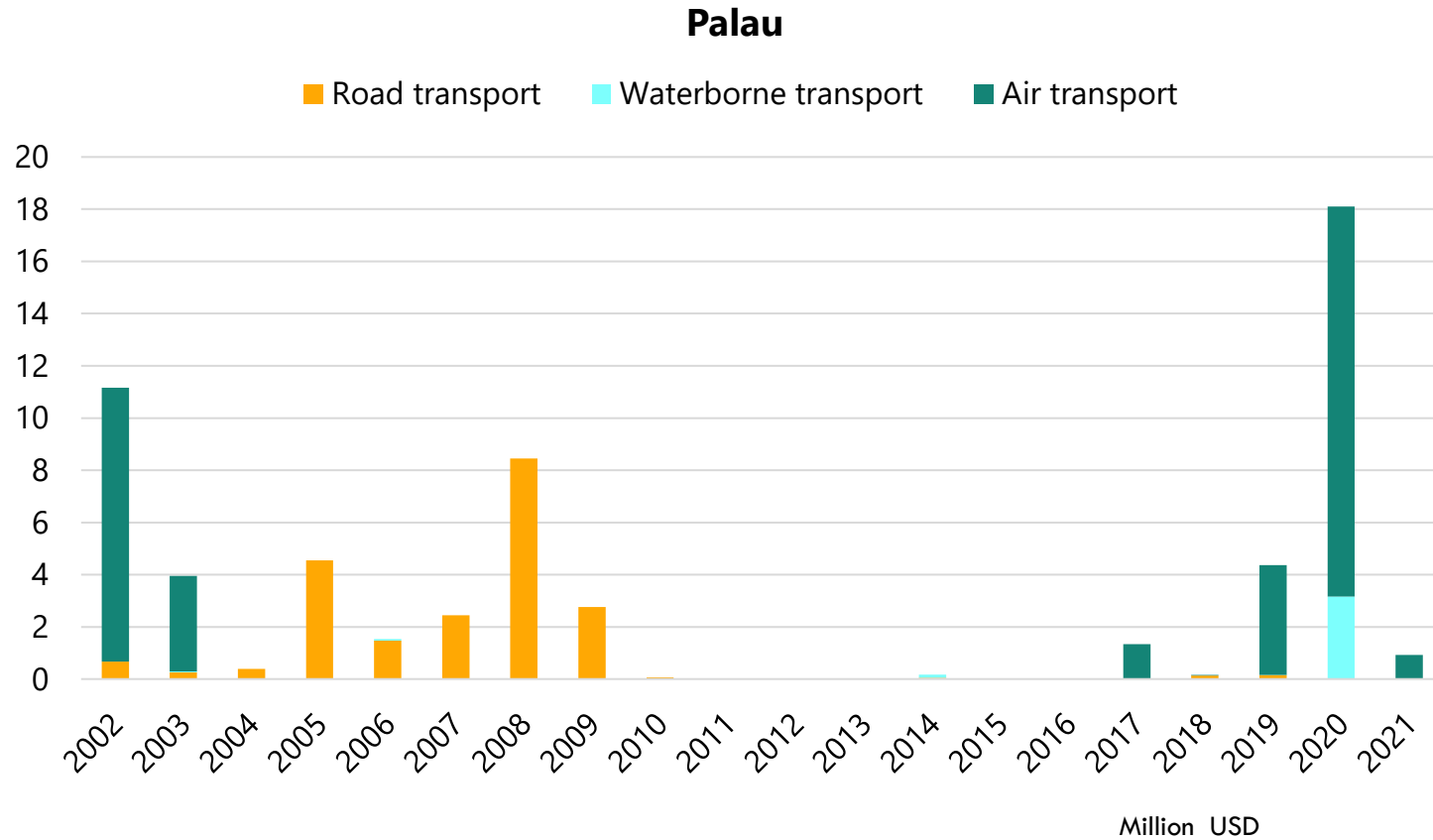
Vanuatu



Marshall Islands



OFFICIAL DEVELOPMENT ASSISTANCE



POLICY INSIGHTS

TRANSPORT RELATED POLICY DOCUMENTS/ LEGISLATIONS

A record of **10** Transport related documents/ legislations



Updated Nationally
Determine Contributions,
2022

[Weblink](#)

Latest NDC Overview:

Are there any transport relevant mitigation targets mentioned? No

Are there any transport relevant adaptation targets mentioned? No

Are there any transport relevant mitigation measures mentioned? Yes

Are there any transport relevant adaptation measures mentioned? No

Document Name	Year Published	Document Type	Road	Shipping	Aviation
Second National Communication	2014	National Report to International/ Regional Processes	x		x
Motor Traffic Act 2014	2014	Transport Laws/ Regulations	x		
Framework for Climate Change Adaptation and Disaster Risk Reduction	2015	Other Transport-related Policy	x		
Port Authority Act 2015	2015	Transport Laws/ Regulations			x
Nauru First NDC (Updated submission)	2016	Nationally Determined Contributions	x		x
Nauru Energy Roadmap 2018-2020	2018	Other Transport-related Policy	x	x	x
Nauru Integrated Infrastructure Strategic Plan	2019	Other Transport-related Policy	x	x	x
National Sustainable Development Strategy 2019-2030	2019	National Development Policy	x	x	x
Voluntary National Review 2019	2019	National Report to International/ Regional Processes	x	x	x
Environmental Management And Climate Change Act 2020	2020	Transport Laws/ Regulations	x		

TRANSPORT RELATED TARGETS

Transport Sector Measure	Text/Remarks	Document Name	Target year
General aviation improvements	Number of aircraft movement / week = 12-15 Number of incoming passengers / months > 2500 Number of recorded incident at airport (debris & intrusion) / year <5	Nauru Integrated Infrastructure Strategic Plan	2025
General public transport	Number of operating public buses on the island = 16	Nauru Integrated Infrastructure Strategic Plan	2025
General shipping improvement	Ship turn-around time (days) for a 300 TEUs vessel. = 5 Storage capacity at ground level (TEUs) = 600 Number of container discharged/ back-loaded/year (TEUs) > 4500	Nauru Integrated Infrastructure Strategic Plan	2025
Target - Net zero, carbon neutrality, and other long-term climate action	This updated NDC sets the beginning of the path for Nauru to progress towards our aspiration of achieving net zero greenhouse gas emissions by 2050.	Nauru First NDC (Updated submission)	2050
Transport infrastructure resilience	Number of lane wide flooded road segments after heavy rain < 2	Nauru Integrated Infrastructure Strategic Plan	2025
General transport asset management	% of maintenance works awarded to private contractor > 80 Number of intersections / road segments with potholes or cracks hampering smooth traffic mor damaging vehicles <2	Nauru Integrated Infrastructure Strategic Plan	2025

TRANSPORT POLICY MEASURES



Road Transport Subsector

Transport Sector Measure	Text/Remarks	Document Name	Year Published
Active transport infrastructure expansion	Capital repair to footpaths	Nauru Integrated Infrastructure Strategic Plan	2019
General active mobility	Undertake a study of incentives to increase the use of bicycles and motorcycles for personal transport, as well as car-pooling and other behavioural changes to encourage energy efficiency, and implement as appropriate.	Nauru Energy Roadmap 2018-2020	2018
General active mobility	Design and introduce incentives to increase the use of bicycles and motorcycles for personal transport, as well as car-pooling and other behavioural changes to encourage energy efficiency Measures include public awareness programmes, vehicle emission standards, promoting fuel-efficient and alternative fuel vehicles, improving public transport services, introducing financial incentives to encourage energy efficiency and promoting non-motorised transport, including fishing canoes for use over and the deeper ocean waters.	Second National Communication	2014
General active mobility	Design and introduce incentives to increase the use of bicycles and motorcycles for personal transport, as well as car-pooling and other behavioural changes to encourage energy efficiency	Framework for Climate Change Adaptation and Disaster Risk Reduction	2015
General e-mobility	Study the feasibility of LPG, hybrid and electric (powered by renewable electricity) vehicles, including buses.	Nauru Energy Roadmap 2018-2020	2018
General infrastructure improvements	Repairs to roadside curbs and gutters Addition of two sets of traffic lights on Simpson Rd	Nauru Integrated Infrastructure Strategic Plan	2019
Reduction of transport/ logistics costs	improving the drainage system and roads to lower the economic costs of domestic transportation	Voluntary National Review 2019	2019
Vehicle inspection and maintenance	Stricter mtesting and enforcement as part of warrant-of-fitness inspections provides a further opportunity to enhance existing vehicles' fuel efficiency.	Second National Communication	2014
Vehicle scrappage scheme	Replace heavy-duty vehicles as they reach end of life Replace heavy-duty equipment (excavators, rock breakers, dump trucks, screens etc.) Replace light-duty vehicles as they reach end of life	Nauru Integrated Infrastructure Strategic Plan	2019
Biofuels	Carry out a study on potential substitutes of petroleum (e.g. biofuel, biomass).	Nauru Energy Roadmap 2018-2020	2018
General alternative fuels	Investigate substitutes to diesel and petrol for transport.	Nauru Energy Roadmap 2018-2020	2018
General public transport	Conduct technical assessment of low-carbon transport options	Nauru First NDC (Updated submission)	2022
General public transport	design and implement a public transport system for Nauru.	Nauru Energy Roadmap 2018-2020	2018
General public transport	The government shall also develop a framework for the private sector to provide regular, reliable, low cost public road transport.	Voluntary National Review 2019	2019

TRANSPORT POLICY MEASURES



Road Transport Subsector

Transport Sector Measure	Text/Remarks	Document Name	Year Published
General public transport	Improve transport infrastructure and provide reliable and affordable public transport service Measures include public awareness programmes, vehicle emission standards, promoting fuel-efficient and alternative fuel vehicles, improving public transport services, introducing financial incentives to encourage energy efficiency and promoting non-motorised transport, including fishing canoes for use over and the deeper ocean waters.	Second National Communication	2014
General public transport	Number of operating public buses on the island = 16	Nauru Integrated Infrastructure Strategic Plan	2019
General public transport	Purchase of 2 large and 2 smaller buses Upgrade and replace public transport and school buses	Nauru Integrated Infrastructure Strategic Plan	2019
General shared mobility	Undertake a study of incentives to increase the use of bicycles and motorcycles for personal transport, as well as car-pooling and other behavioural changes to encourage energy efficiency, and implement as appropriate.	Nauru Energy Roadmap 2018-2020	2018
General shared mobility	Design and introduce incentives to increase the use of bicycles and motorcycles for personal transport, as well as car-pooling and other behavioural changes to encourage energy efficiency	Second National Communication	2014
General shared mobility	Design and introduce incentives to increase the use of bicycles and motorcycles for personal transport, as well as car-pooling and other behavioural changes to encourage energy efficiency	Framework for Climate Change Adaptation and Disaster Risk Reduction	2015
Performance-based transport maintenance contracts	The government shall continue to contract out road maintenance by strengthening the mechanism for awarding contracts, and monitoring performance with the objective of achieving a well-maintained road network throughout Nauru.	Voluntary National Review 2019	2019
Transport infrastructure resilience	Number of lane wide flooded road segments after heavy rain < 2	Nauru Integrated Infrastructure Strategic Plan	2019
General transport asset management	% of maintenance works awarded to private contractor > 80 Number of intersections / road segments with potholes or cracks hampering smooth traffic or damaging vehicles < 2	Nauru Integrated Infrastructure Strategic Plan	2019
General transport asset management	Resealing and repair of existing roads	Nauru Integrated Infrastructure Strategic Plan	2019
Energy efficient vehicle purchase incentives	Measures include public awareness programmes, vehicle emission standards, promoting fuel-efficient and alternative fuel vehicles, improving public transport services, introducing financial incentives to encourage energy efficiency and promoting non-motorised transport, including fishing canoes for use over and the deeper ocean waters.	Second National Communication	2014

TRANSPORT POLICY MEASURES



Road Transport Subsector

Transport Sector Measure	Text/Remarks	Document Name	Year Published
Road infrastructure expansion	Develop new road for waterfront area near the port	Nauru Integrated Infrastructure Strategic Plan	2019
General education and behavior change	Measures include public awareness programmes, vehicle emission standards, promoting fuel-efficient and alternative fuel vehicles, improving public transport services, introducing financial incentives to encourage energy efficiency and promoting non-motorised transport, including fishing canoes for use over and the deeper ocean waters.	Second National Communication	2014
Vehicle air pollution emission standards	Measures include public awareness programmes, vehicle emission standards, promoting fuel-efficient and alternative fuel vehicles, improving public transport services, introducing financial incentives to encourage energy efficiency and promoting non-motorised transport, including fishing canoes for use over and the deeper ocean waters.	Second National Communication	2014
Vehicle efficiency standards	Implementation of energy efficiency in transport.	Nauru Energy Roadmap 2018-2020	2018
Vehicle efficiency standards	Improving the efficiency of existing vehicle stock	Second National Communication	2014
Vehicle restrictions (import, age, access, sale, taxation)	Implement appropriate options to discourage the importation of vehicles with large engines.	Nauru Energy Roadmap 2018-2020	2018
Vehicle restrictions (import, age, access, sale, taxation)	To minimize air pollution and mitigate over burdening of public infrastructure and resources, the Transport Secretariat recently introduced a new policy to restrict the import of old vehicles including all passenger vehicles, buses, trucks and motorcycles.	Voluntary National Review 2019	2019
General infrastructure improvements	Improve transport infrastructure and provide reliable and sustainable transport services	National Sustainable Development Strategy 2019-2030	2019
General education and behavior change	Design and implement awareness campaign to communities on energy efficiency in transport.	Nauru Energy Roadmap 2018-2020	2018

TRANSPORT POLICY MEASURES



Domestic Navigation Subsector

Transport Sector Measure	Text/Remarks	Document Name	Year Published
General shipping improvement	Ship turn-around time (days) for a 300 TEUs vessel. = 5 Storage capacity at ground level (TEUs) = 600 Number of container discharged/ back-loaded/year (TEUs) > 4500	Nauru Integrated Infrastructure Strategic Plan	2019
Port infrastructure improvements	Complete construction of the new port facility	Nauru First NDC (Updated submission)	2022
Port infrastructure improvements	The marine transport sector improvements include: barges for loading/unloading cargo; pilot boat for port entry and at sea emergency; and NFMRA boats for in-shore SAR.	Second National Communication	2014
Port infrastructure improvements	Redevelopment of Nauru Port	Nauru Integrated Infrastructure Strategic Plan	2019
General transport institutional reform	The Port Authority is established.	Port Authority Act 2015	2015
General infrastructure improvements	Improve transport infrastructure and provide reliable and sustainable transport services	National Sustainable Development Strategy 2019-2030	2019
General education and behavior change	Design and implement awareness campaign to communities on energy efficiency in transport.	Nauru Energy Roadmap 2018-2020	2018

TRANSPORT POLICY MEASURES

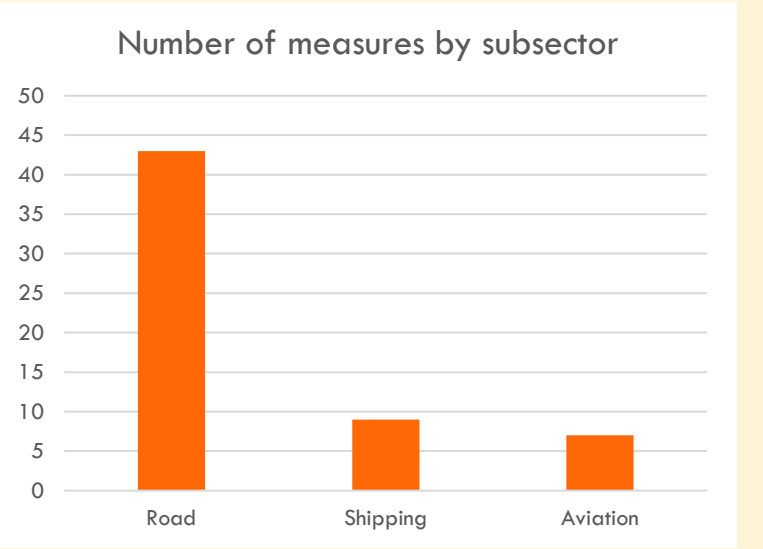
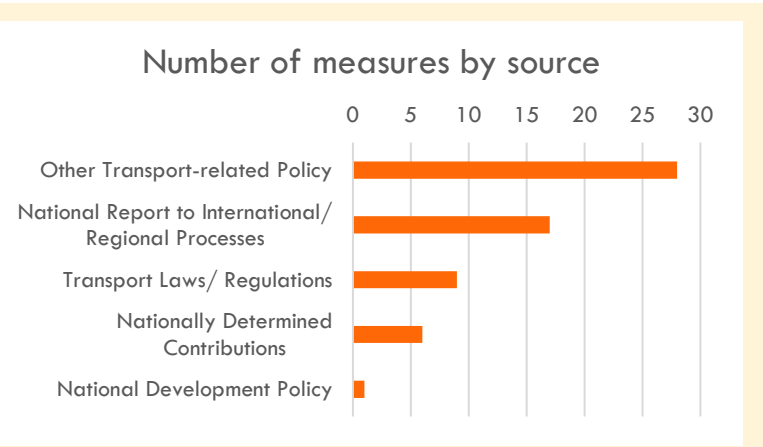


Domestic Aviation Subsector

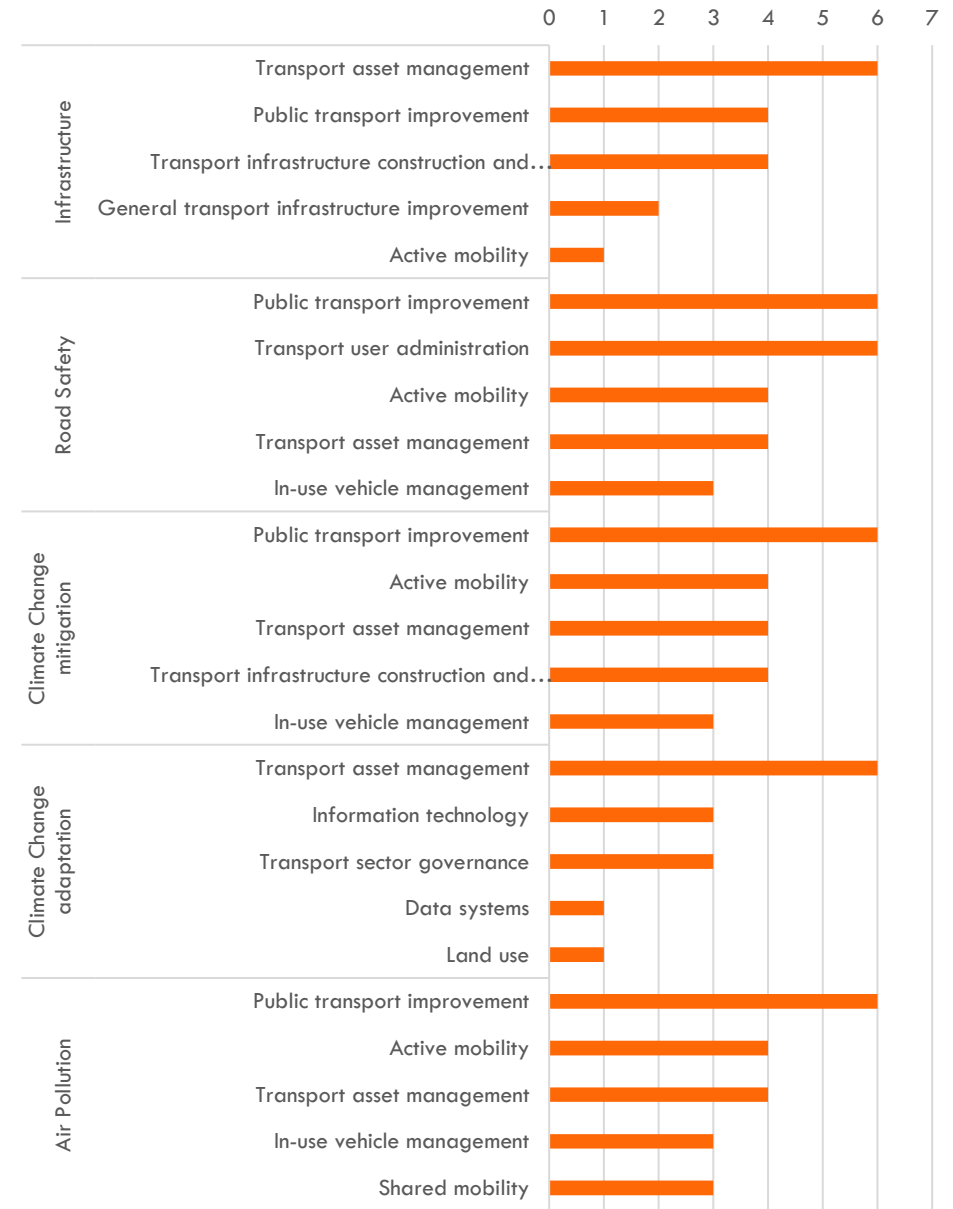
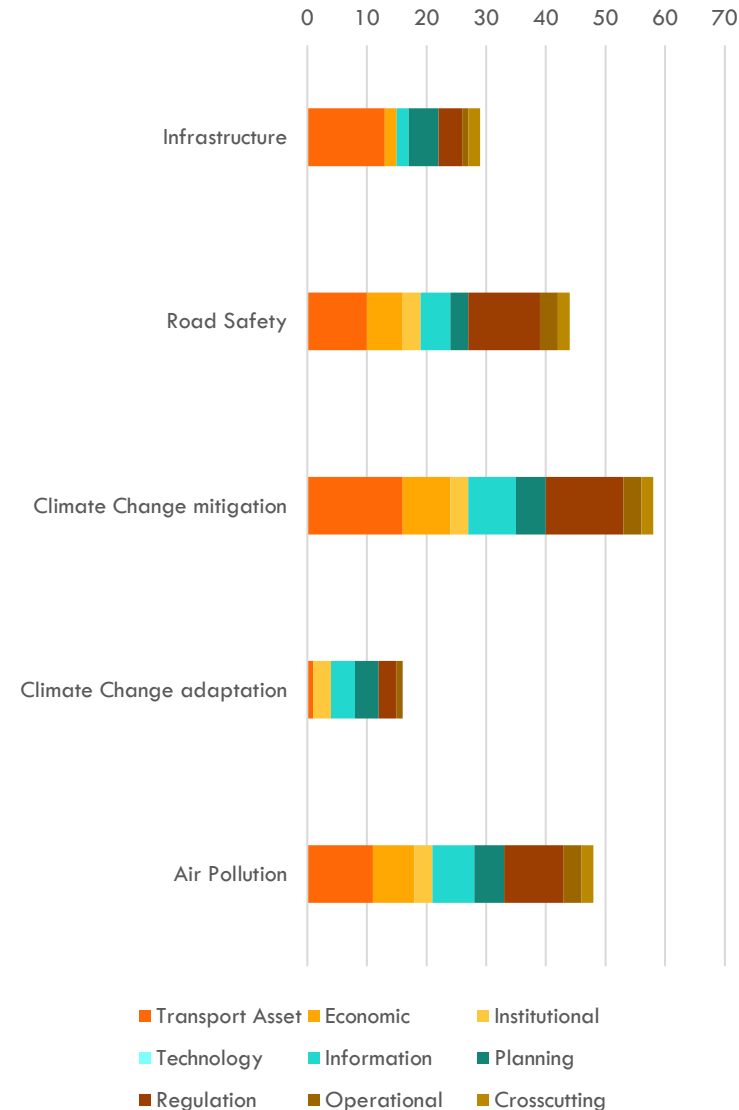
Transport Sector Measure	Text/Remarks	Document Name	Year Published
General aviation improvements	Number of aircraft movement / week = 12-15 Number of incoming passengers / months > 2500 Number of recorded incident at airport (debris & intrusion) / year <5	Nauru Integrated Infrastructure Strategic Plan	2019
General aviation improvements	Resealing and repair of runway & taxiway Renovation to nav-aid equipment building Replacement VHF air-ground radio	Nauru Integrated Infrastructure Strategic Plan	2019
General infrastructure improvements	Improve transport infrastructure and provide reliable and sustainable transport services	National Sustainable Development Strategy 2019-2030	2019
General education and behavior change	Design and implement awareness campaign to communities on energy efficiency in transport.	Nauru Energy Roadmap 2018-2020	2018

POLICY ANALYSIS

Top 5 measure types for each dimension



Number of measures by dimension and framework



“ATO translates data into insights, policies, and investments”

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