

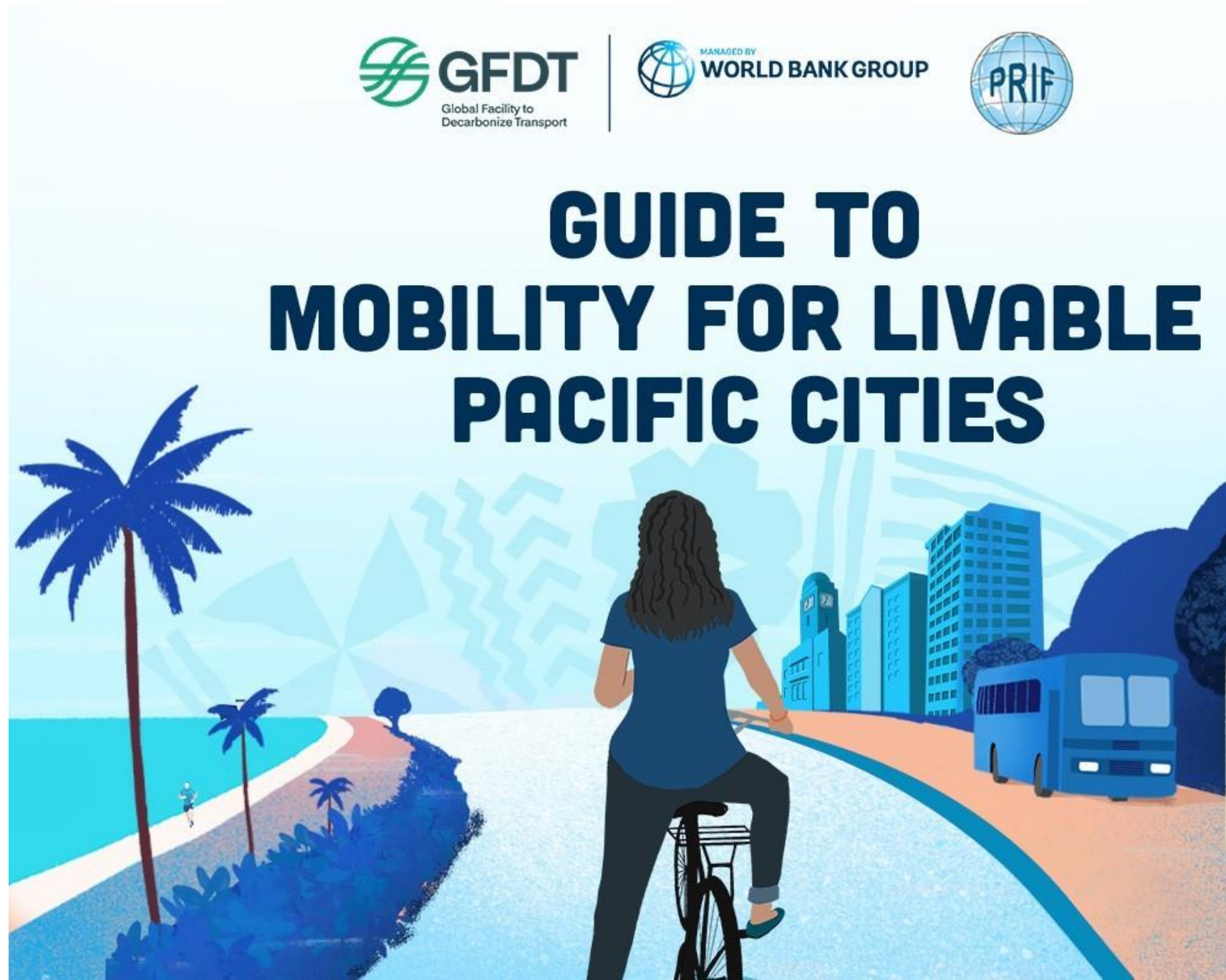
# Guide to Mobility for Livable Pacific Cities Webinar Series

Webinar 6 of 9:

Land Use Planning to  
Guide Compact City  
Development

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*Yoichiro Kono*



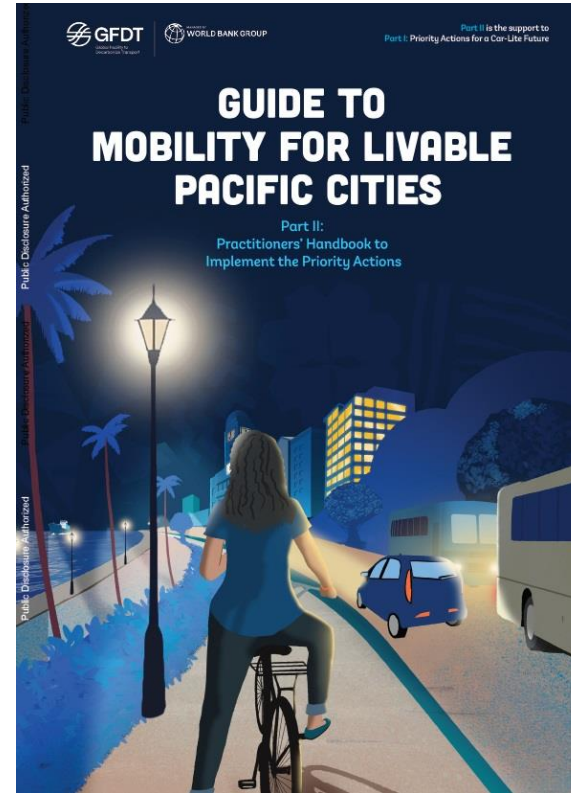
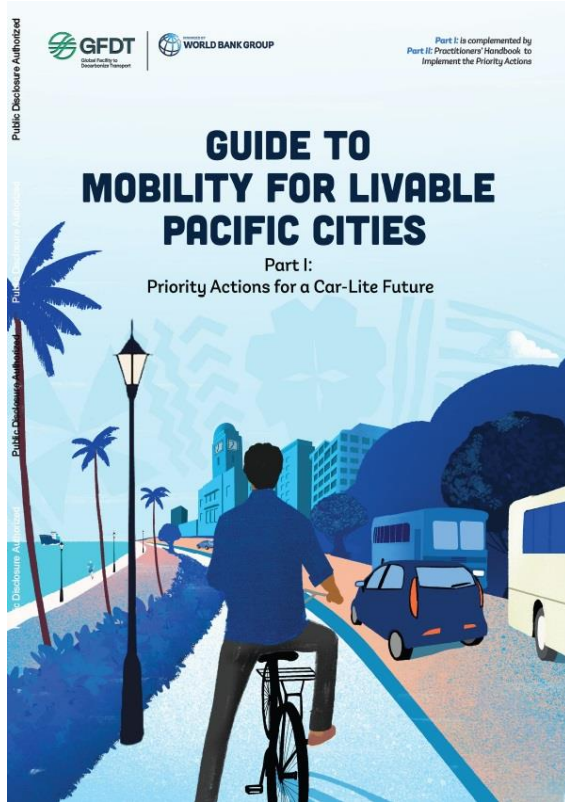
# Guide to Mobility for Livable Pacific Cities

## Part I: Priority Actions for a Car-Lite Future

## Part II: Practitioners' Handbook to Implement the Priority Actions



Feature Story



Strategy 6: Use land use planning to guide compact city development  
Strategy 8: Organize parking to make streets less chaotic

# About the Speaker



**Yoichiro Kono**

- Transport Specialist, World Bank (2023)
- 15 years experience in urban and transport planning
- Professional Engineer (Urban and Regional Planning, Japan)
- Registered 1<sup>st</sup> Class Architect, Japan
- Formerly with UN-Habitat (Kenya HQs), Japan International Cooperation Agency (JICA Philippines), Consulting Firm and Architectural Company (Japan)
- Kiribati, the Philippines, Bangladesh, Myanmar, Kenya, Uganda
- MSc in Urban Engineering, Sustainable Urban Regeneration Course, University of Tokyo, Japan

# Contents

1. Issues and Opportunities
2. Recommendations
3. Priority Actions

## Key Takeaways:

- I. Land use planning can promote public transport and better streets for pedestrians and cyclists
- II. We need to design land use plan together with multiple perspectives.

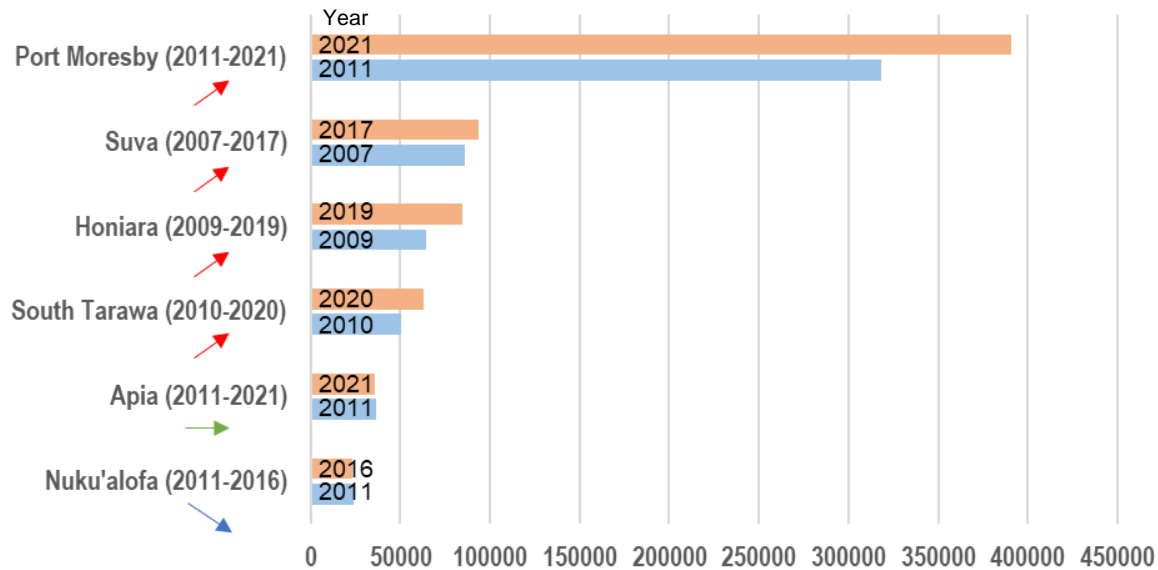
# 1. Issues and Opportunities

## Population Growth

The population in Pacific Island cities has increased, while others face decline.  
Recent Annual Growth Rate

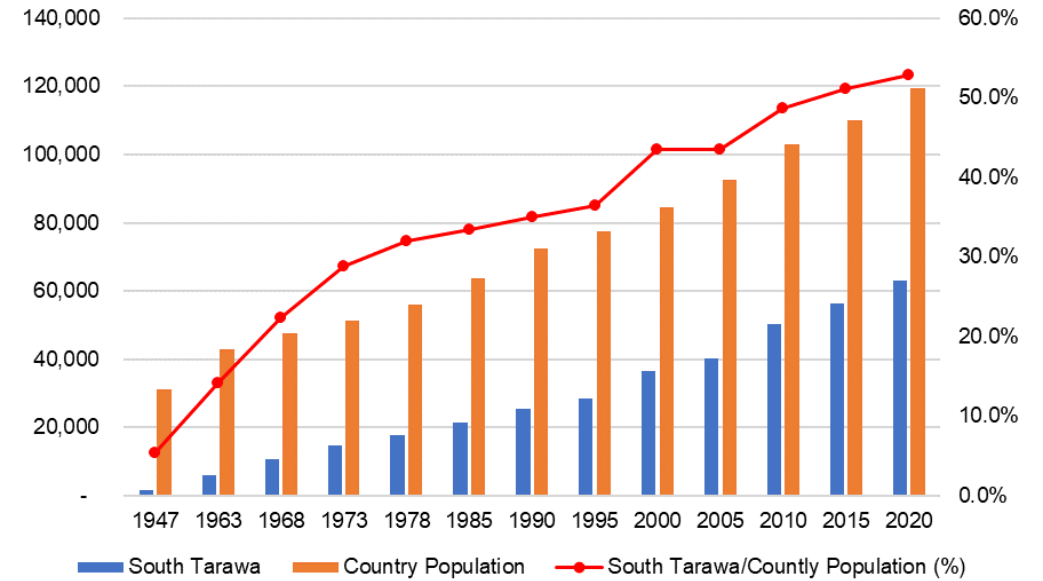
- Honiara: **+2.7%**
- Port Moresby: **+2.1%**
- South Tarawa: **+1.9%**

Population Trend in Some Pacific Cities



Source: Census of each country

Population Trend in South Tarawa (Kiribati)



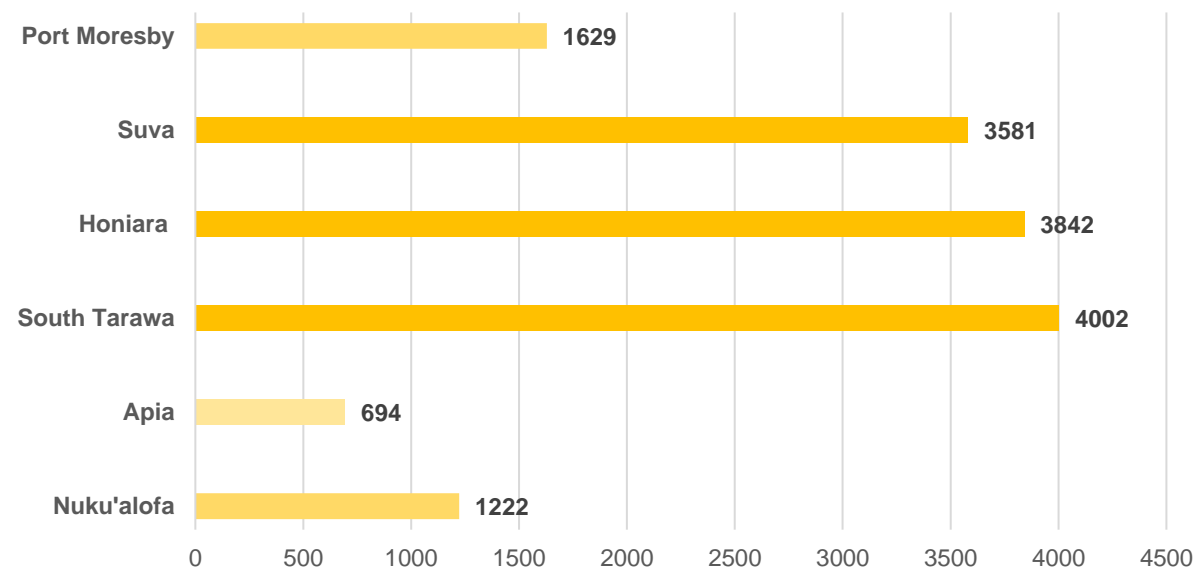


# 1. Issues and Opportunities

## High Population Density

Capitals and main cities in Pacific Island countries have shown high population densities of more than **3,500** people per square kilometer, which is equivalent to major urban areas around the world.

Population Density in Some Pacific Cities



# 1. Issues and Opportunities

## Situation

- Population Growth
- Rural-urban Migrations
- High Population Density
- Rapid Economic Growth
- Natural Disasters
- ...



## Issues

- Car-dependence
- Traffic Congestions
- Informal Settlements
- Lack of Infrastructure
- Environmental Issues
- Insufficient Land
- Urban Sprawl
- ...



## Solutions

- Land Use Planning
- Transport Infrastructure
- Housing Policy
- ...



# 1. Issues and Opportunities (Land Use Planning)

## Lack of institutional capacity

- Lack of the legal authority, financial capacity, and staff
- Infrequent planning (every 10 – 15 years) with no updates during the period

## Customary and public land ownership may pose challenges

- Limited rights to apply land use plans and zoning regulations to customary lands.
  1. Conversion of customary land to freehold land
  2. Formal governance structures to control the customary landholdings
- Strong stakeholder engagement to promote the general goals of development plans

Land System Distribution of Tenure Systems in the Pacific Island Countries

	Public	Freehold	Customary
Cook Islands	Some	Little	95%
Fiji	4%	8%	88%
Kiribati	50%	<5%	>45%
Marshall Island	<1%	0%	>99%
Federated States of Micronesia	35%	<1%	65%
Nauru	<10%	0%	>90%
Niue	1.50%	0%	98.50%
Palau	Most	Some	Some
Papua New Guinea	2.50%	0.50%	97%
Samoa	15%	4%	81%
Solomon Islands	8%	5%	87%
Timor-Leste	Some	Some	Most
Tokelau	1%	1%	98%
Tonga	100%	0%	0%
Tuvalu	5%	<0.1%	95%
Vanuatu	2%	0%	98%

Source: ADB *The Dynamics of Urbanization, Housing, and Land Provision in the Pacific Island Countries (2019)*

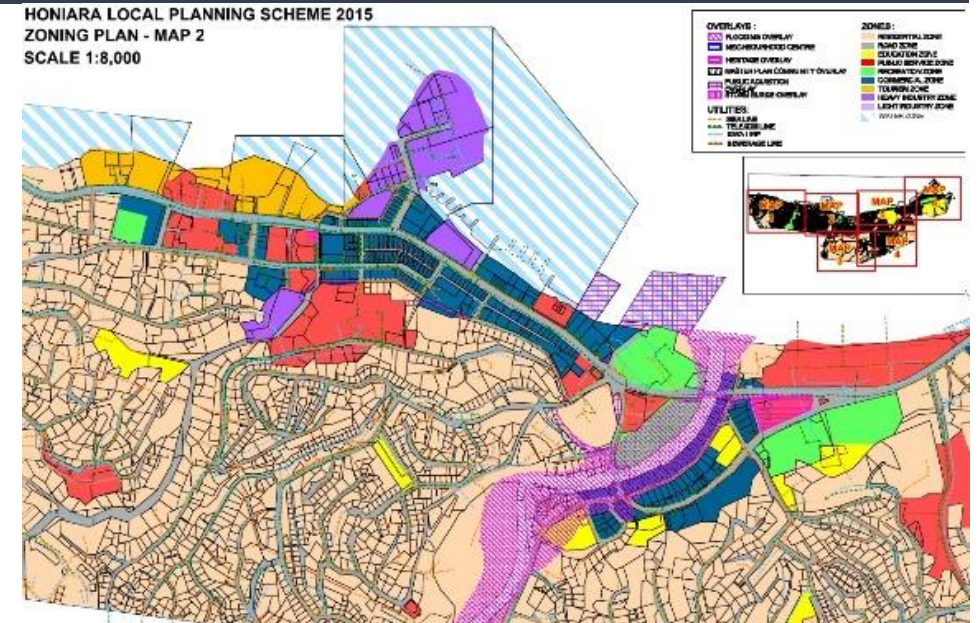
Note: Public includes crown land and land owned by provincial and local governments. Freehold includes land that is not strictly freehold, but similar in characteristics, such as the “perpetual estates” found in Solomon Islands. Customary: Timor-Leste does not yet have a separate legal category of “customary land,” even though most of its rural land remains under customary forms of authority.



# 1. Issues and Opportunities (Land Use Planning)

## Single purpose land use leads to longer trips and higher motorization

- Land use plans and zoning codes in some Pacific Island Cities allow for “single-use development”.
- Residential areas are often located far from main corridors with high potential for public transport development.
- People are forced to live far from public transport networks, leading to increased motorization.
- Separating land uses, such as industrial areas from residential areas, can reduce negative impacts on housing.
- Mixed land uses benefit from being close together, such as residential areas, small shops, offices, schools, and public services, which encourages walking and cycling.



### OVERLAYS :

- ▨ FLOODING OVERLAY
- ▭ NEIGHBOURHOOD CENTRE
- ▨ HERITAGE OVERLAY
- ▨ MASTER PLAN COMMUNITY OVERLAY
- ▨ PUBLIC AQUISITION OVERLAY
- ▨ STORM SURGE OVERLAY

### UTILITIES:

- SIEA LINE
- TELEKOM LINE
- SIWA LINE
- SEWERAGE LINE

### ZONES :

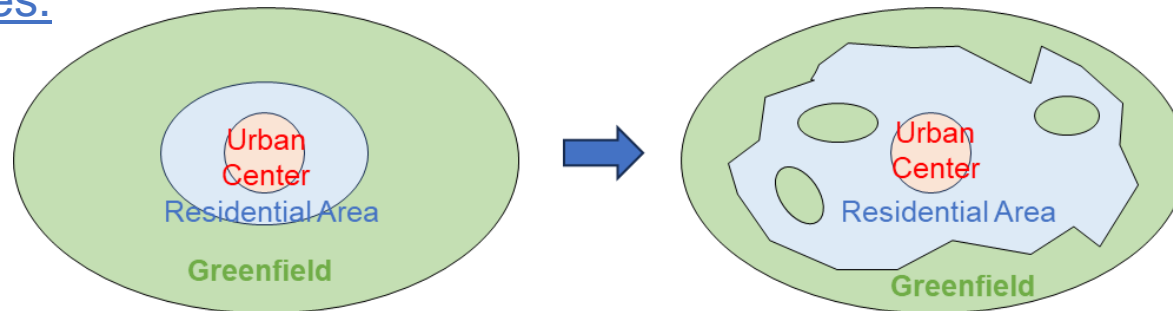
- ▭ RESIDENTIAL ZONE
- ▭ ROAD ZONE
- ▭ EDUCATION ZONE
- ▭ PUBLIC SERVICE ZONE
- ▭ RECREATION ZONE
- ▭ COMMERCIAL ZONE
- ▭ TOURISM ZONE
- ▭ HEAVY INDUSTRY ZONE
- ▭ LIGHT INDUSTRY ZONE
- ▭ WATER ZONE

Honiara Zoning Plan (Solomon Islands)

# 1. Issues and Opportunities (Land Use Planning)

## New development is mostly planned in greenfield locations, causing urban sprawl

- Some cities demonstrate that the uncontrolled expansion of urban areas (urban sprawl) into surrounding rural land leads to the spread of low-density, car-dependent development and the deterioration of natural resources.



## Low density urban development

- Single/Second stories building are predominant in some cities.
- Zoning ordinances/codes generally restrict density of development (floor area ratio, building height, and lot coverage ratio)



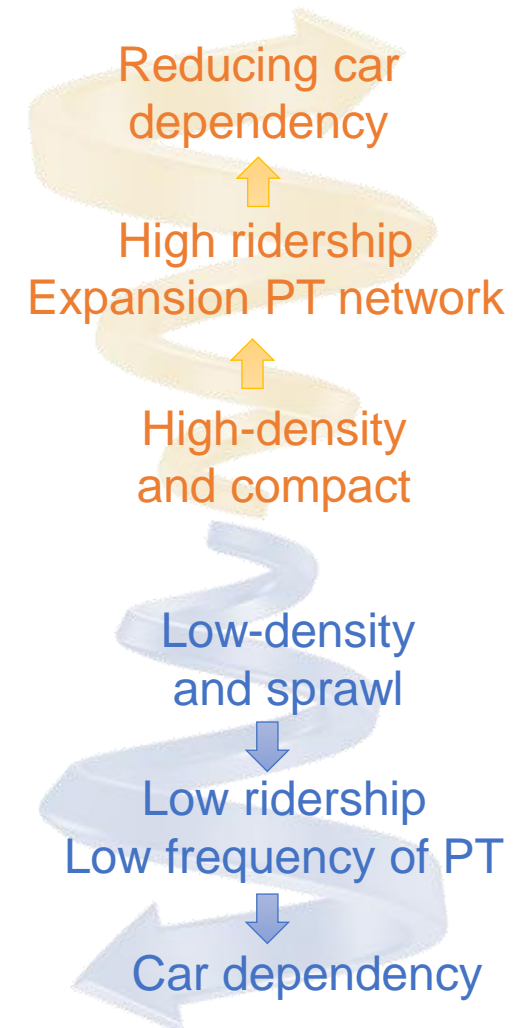
# 1. Issues and Opportunities (Land Use Planning)

## Lack of coordination with transport plans

- Transportation plan and land use plan are often developed separately. (e.g. Department of Transportation and Department of Land/Natural Resources/Urban Development)
- Good coordination leads encouraging higher density development around transit stops.

## Absence of Neighborhood Planning and Building Codes to provide adequate space for an efficient street network

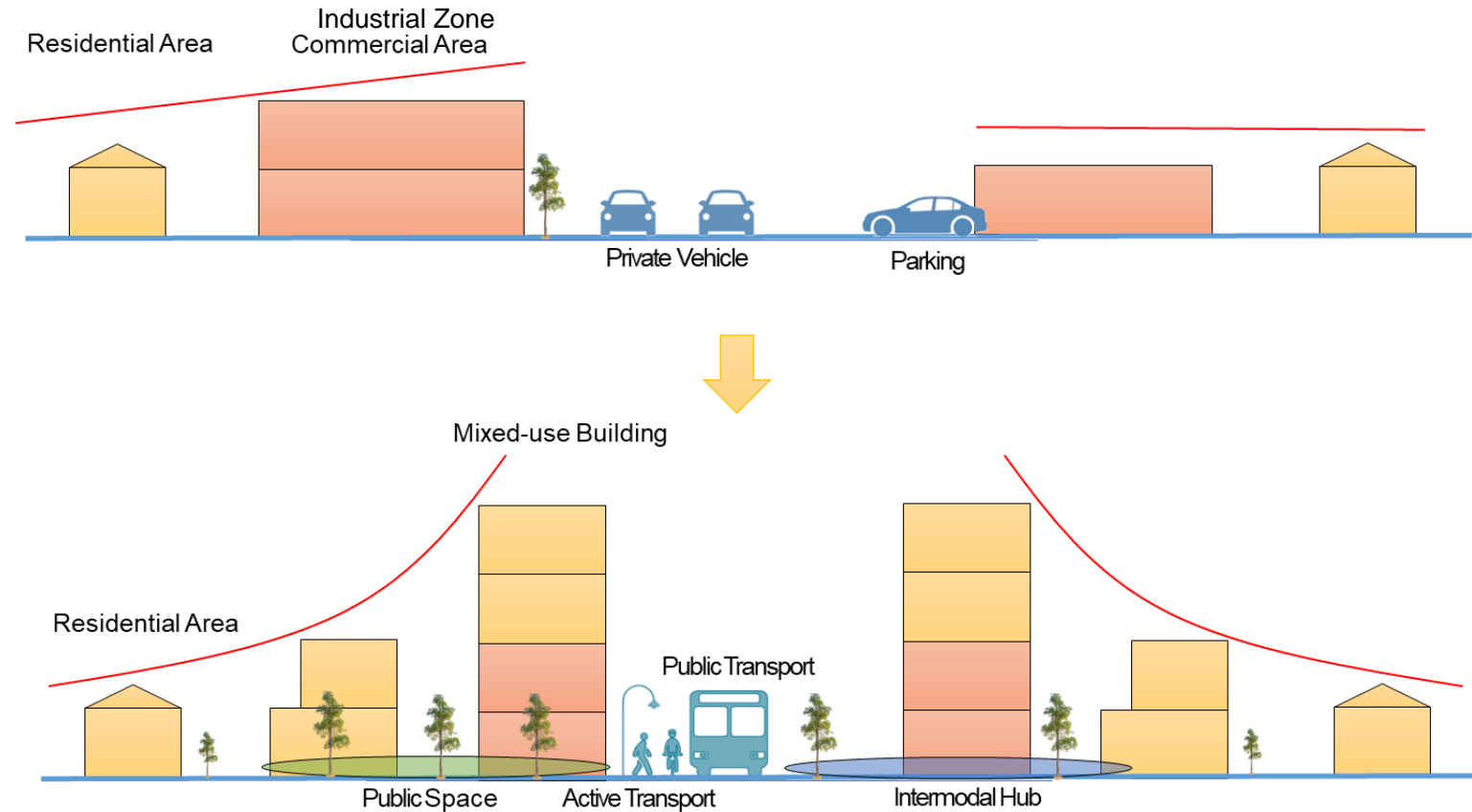
- Land use plans and spatial plans in PICs often include road networks.
- A well-developed plan includes not only the road and public transport networks but also walking and cycling networks, which are key elements for reducing car dependency.





## 2. Recommendations

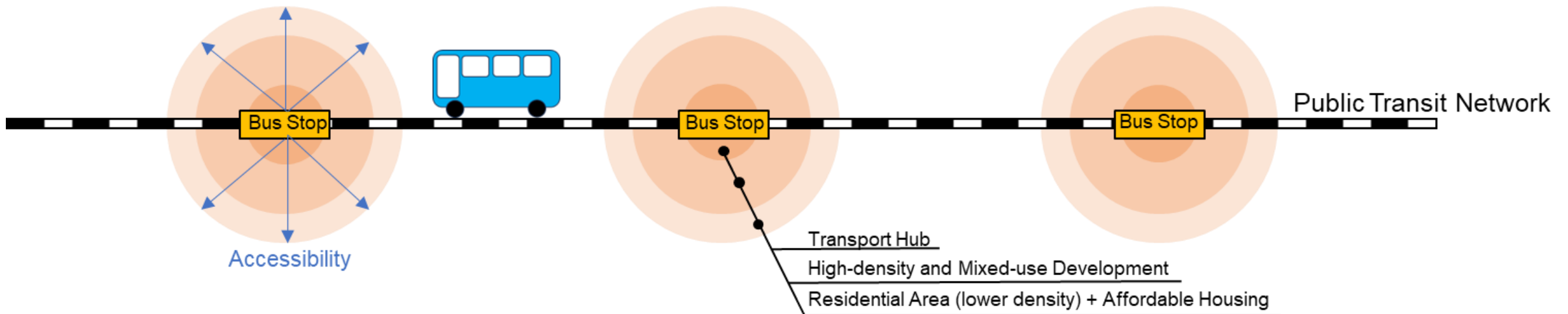
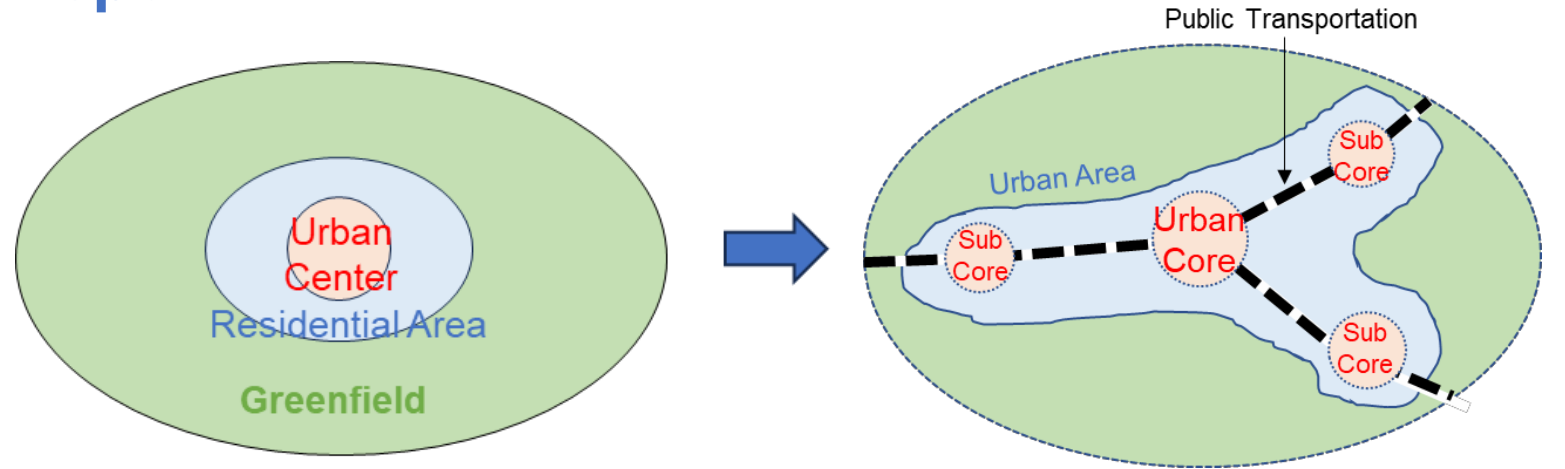
- ✓ **Densify near Public Transport**
- ✓ **Mixed Land Use**
- ✓ **Transit Orientation**





## 2. Recommendations

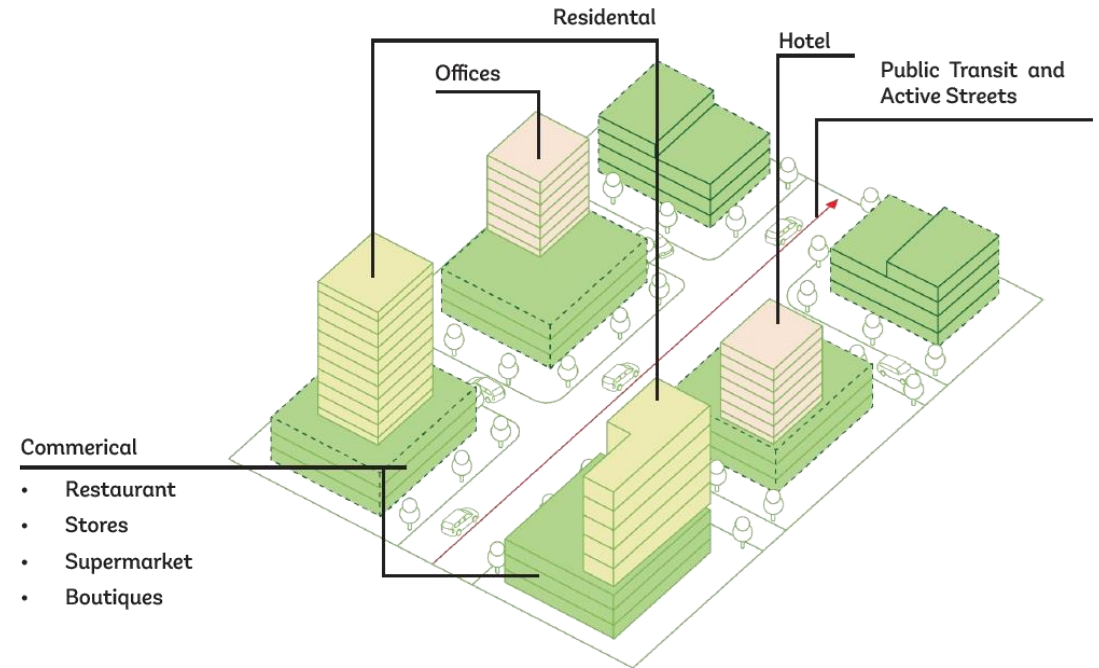
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## 2. Recommendations

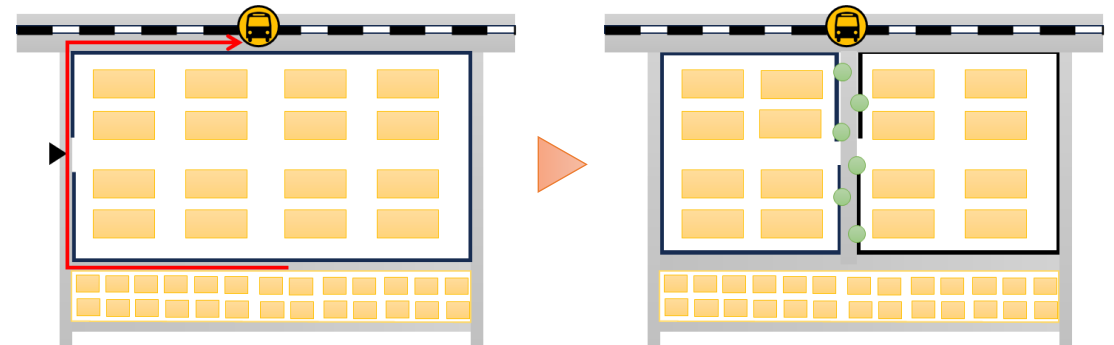
### ✓ Active Streets

- Waking environment should be not only safe but interesting
- One of unpleasant land uses to walk is a surface parking lot or parking garage



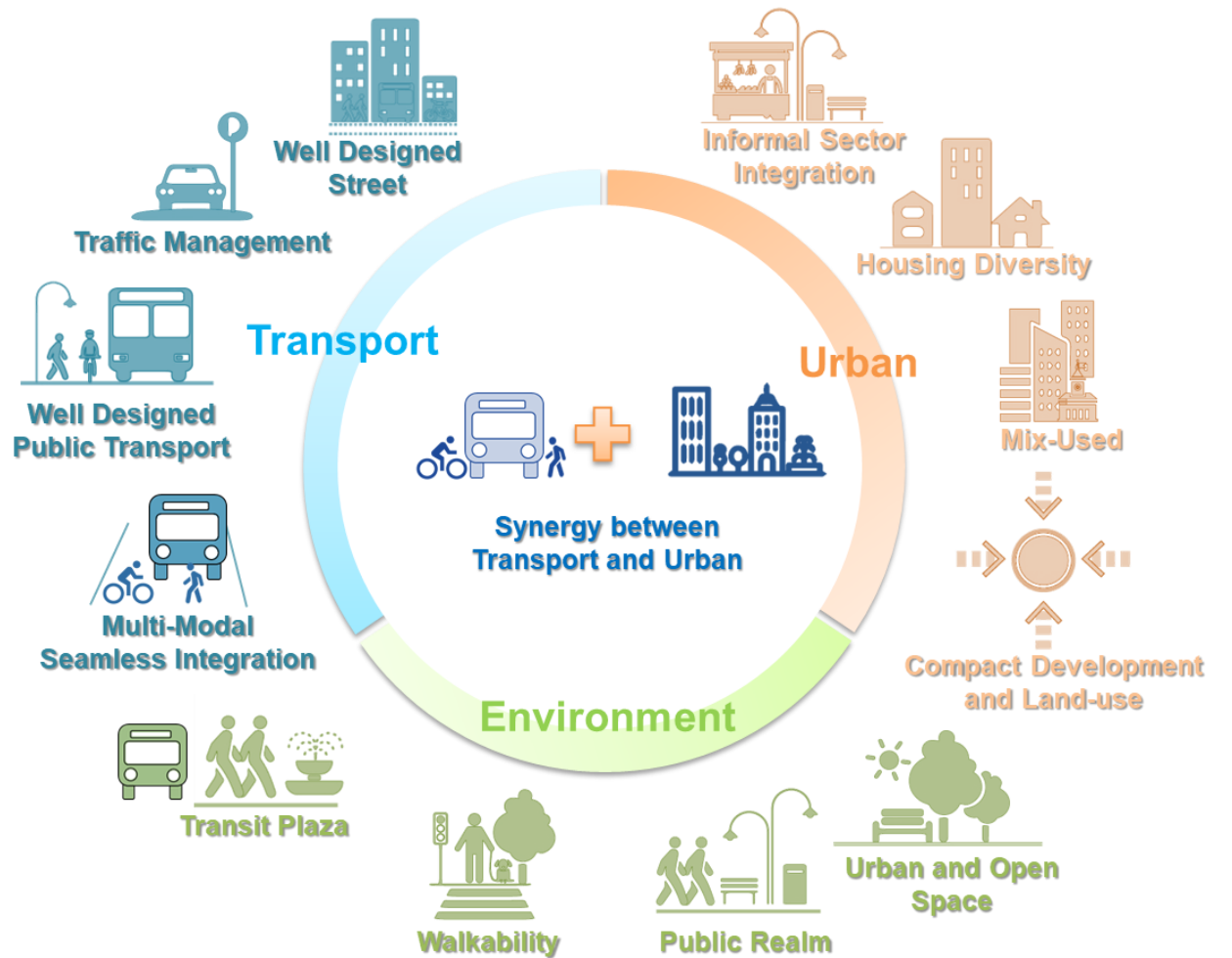
### ✓ Connect the Blocks

- In some PICs, a gated community is often developed in a giant superblock.



## 2. Recommendations

- ✓ In-Fill Development before greenfield development
- ✓ Provide affordable housings in transit accessible locations
- ✓ Parking mandates for new developments (Strategy 8)
  - Maximum parking standard rather than minimum standard



Concept and Synergy Effects of (Bus) Transit Oriented Development

# 3. Priority Actions

Always

## Capacity Enhancement for efficient approvals and enforcement



Develop capacity of land control institutions for efficient approvals and enforcement.

Complexity	Capital Cost	Ongoing Cost	Priority Locations	Lead Entity
High	Low	Low	<ul style="list-style-type: none"> <li>Honiara</li> <li>Port Moresby</li> <li>Lae</li> <li>Mount Hagen</li> <li>Labasa</li> <li>Lautoka</li> <li>Nadi</li> <li>Suva</li> <li>Port Vila</li> </ul>	City or land use authority

2025

## 2025-2026 Land use plan that incorporate car-lite principles particular focus on town/city centers



Adopt coordinated land use and transportation plans that incorporate car-lite principles, with particular focus on land use in town/city centers and along primary transport corridors.

Complexity	Capital Cost	Ongoing Cost	Priority Locations	Lead Entity
Varies, and can be simplified	Low	Low	<ul style="list-style-type: none"> <li>Honiara</li> <li>Port Moresby</li> <li>Lae</li> <li>Mount Hagen</li> <li>Labasa</li> <li>Lautoka</li> <li>Nadi</li> <li>Suva</li> <li>Port Vila</li> </ul>	Transport and land use authorities

2026

## Parking requirements



Eliminate minimum parking requirements from land regulations; adopt parking maximum rules in downtown areas with access to transportation alternatives.

Complexity	Capital Cost	Ongoing Cost	Priority Locations	Lead Entity
Low	Low	Low	<ul style="list-style-type: none"> <li>Honiara</li> <li>Port Moresby</li> <li>Lae</li> <li>Mount Hagen</li> <li>Labasa</li> <li>Lautoka</li> <li>Nadi</li> <li>Suva</li> <li>Port Vila</li> </ul>	Transport and land use authorities

2027

## Land use plan to support compact development for rural land development



**2027-2029** Adopt land use regulations to support compact development such as form-based codes; establish minimum design principles for rural land development.

Complexity	Capital Cost	Ongoing Cost	Priority Locations	Lead Entity
Moderate-High (depends on existing laws)	Low	Low	<ul style="list-style-type: none"> <li>Honiara</li> <li>Port Moresby</li> <li>Lae</li> <li>Mount Hagen</li> <li>Labasa</li> <li>Lautoka</li> <li>Nadi</li> <li>Suva</li> <li>Port Vila</li> </ul>	Land use authority

2028

## Develop local plans to include key requirements, such as street designs, walking, biking and public transit



Develop local area plans to include key requirements for a car-lite urban environment: compact and mixed land use, street designs that prioritize walking, biking, micromobility and public transit over cars.

Complexity	Capital Cost	Ongoing Cost	Priority Locations	Lead Entity
Moderate	Medium	Low	<ul style="list-style-type: none"> <li>Honiara</li> <li>Port Moresby</li> <li>Lae</li> <li>Mount Hagen</li> <li>Labasa</li> <li>Lautoka</li> <li>Nadi</li> <li>Suva</li> <li>Port Vila</li> </ul>	City or land use authority

2029

## Extend land use planning to customary land



Extend land use planning and regulation to customary land through acceptable mechanisms.

Complexity	Capital Cost	Ongoing Cost	Priority Locations	Lead Entity
High	Low	Low	<ul style="list-style-type: none"> <li>Honiara</li> <li>Port Moresby</li> <li>Lae</li> <li>Mount Hagen</li> <li>Labasa</li> <li>Lautoka</li> <li>Nadi</li> <li>Suva</li> <li>Port Vila</li> </ul>	Land use authority



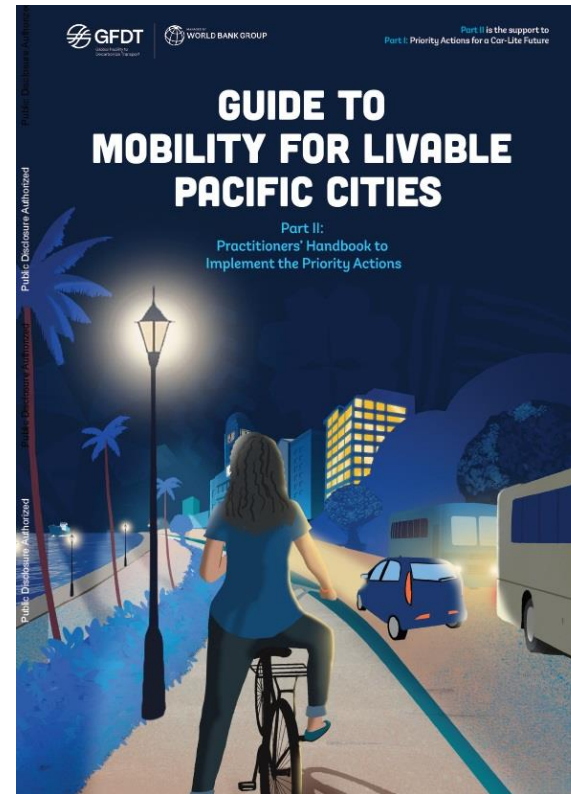
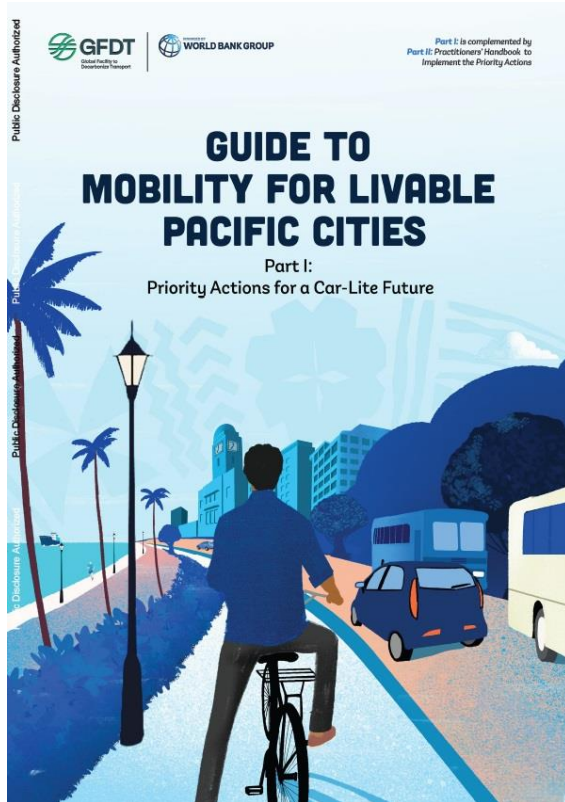
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