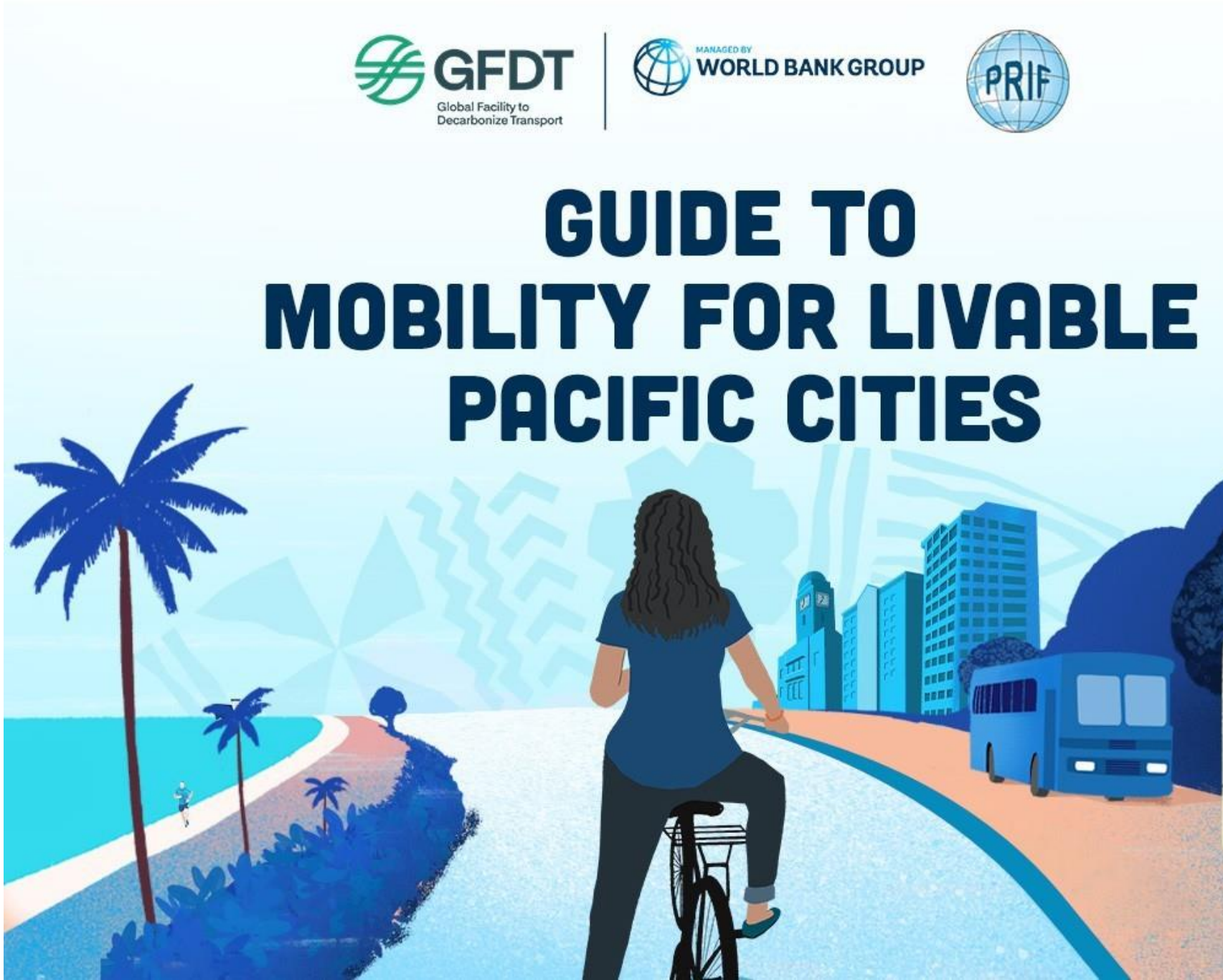
Guide to Mobility for Livable Pacific Cities Webinar Series

Webinar 3 of 9:

Tactical Urbanism – Rapid Street Transformations

Bram van Ooijen



About the Speaker

- Director at VOMobility
- 15 years experience in designing streets for active mobility, predominantly in China and Asia.
- Projects include street design, bicycle networks, greenways, BRT corridor design, low-emission zones, parking management, TOD
- Clients include ADB, World Bank and GIZ.
- Formerly with Institute for Transportation and Development Policy (ITDP) – China office
- MSc in Civil Engineering, Twente University, the Netherlands

- Involved in the Pacific since July 2023
- Two visits, four countries, six weeks in the region
- Time spent in Tonga, Kiribati, Fiji and Solomon Islands

Content

1. Introduction to Tactical Urbanism

2. First tactical urbanism in the Pacific: South Tarawa, Kiribati

3. Opportunities for Tactical Urbanism

4. Tactical Urbanism in the Pacific

5. Getting it Done

6. Way forward - how to mainstream tactical urbanism in the Pacific region?

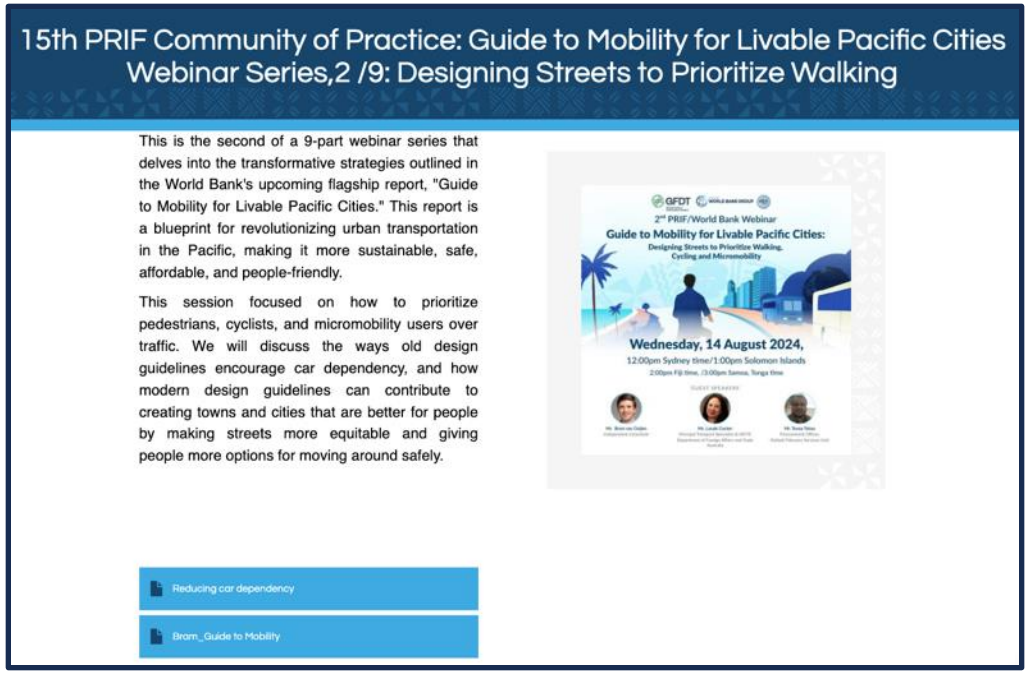
Questions & Discussion

1. Introduction to Tactical Urbanism

A recap of our workshop on street design for active mobility. Info and slides at [this link]

Key takeaways:

1. We need to design our streets better (and more) for **pedestrians and cyclists**
2. We need to see the street as a place for transport, but also **public space**
3. We need to include these ideas in our existing and future road, transportation and land development **strategies, investemnts, policies and projects**



1. Introduction to Tactical Urbanism

What is Tactical Urbanism?

"A design methodology and engagement strategy,

implementing temporary 'tactical demonstrations' and 'trial interventions'

to test living versions of designs with communities in real time,

focused on delivering streets that put people first, making them safer & more livable."

1. Introduction to Tactical Urbanism

Pop-up:
1 day – 1 month

Interim:
1 month – 1 year

Permanent

Source: GDCI

This chart illustrates the progression of an iterative approach to project delivery. Though not all projects need to follow this exact model, it can be helpful to see how each project phase builds towards the next, using incremental steps to deliver a capital project intended to create lasting change.

Project Type (time interval · relative cost)	DEMONSTRATION (1 day - 1 month · $)	PILOT (1 month- 1 year · $$)	INTERIM DESIGN (1 year - 5 years · $$$)	LONG-TERM/CAPITAL (5 years - 50 years · $$$$)
Project Leaders	Can be led by anyone (city, citizen group, or both!)	Government / organizational leadership + involvement required	Government / organizational leadership + involvement required	Government / organizational leadership + involvement required
Permission Status	Sanctioned or unsanctioned	Always sanctioned	Always sanctioned	Always sanctioned
Materials	Low-cost, typically low-durability. Can be borrowed or easily made	Relatively low-cost, but semi-durable materials	Low-moderate cost materials, designed to balance flexibility with maintenance needs	High-cost permanent materials that cannot easily be adjusted
Public Involvement	Public input + public action	Public input, champion engagment, government / organizational stewardship	Public input, government / organizational stewardship	Public input, government / organizational stewardship
Flexibility of Design	High: organizers expect project to be adjusted and removed.	High: organizers expect project to be adjusted; it *may* be re-moved if it does not meet goals	Moderate: organizers expect project to be adjusted, but it is intended to remain in place until capital upgrades are possible	Low: project is considered a permanent capital upgrade that is unlikely to be adjusted signifi-cantly once installed
Collect data to refine approach for current or future projects?	Recommended	Always	Always	Always - project performance can inform future investments

Source: Street Plans Collaborative (2016)

2. First project in the Pacific: South Tarawa, Kiribati

While popular abroad, tactical urbanism was not practiced in the Pacific region until March 2024, outside the St. John Bosco Primary School in Betio, Tarawa, Kiribati.

2. First project in the Pacific: South Tarawa, Kiribati

Works completed include:

- **Crosswalk**, connecting the school gate to an alleyway across, used by many students
- **Road markings** to slow down traffic speeds and increase road safety
- **Road narrowing** at the pedestrian crossing using custom-made planter boxes
- **Improved footpath (right)**, with vehicle parking (including three wrecks) removed, rubbish collected, overgrown grass cut, coconut trees planted
- **Temporary footpath (left)** on the other side of the road through planter boxes and physical measures
- **Seating and play** equipment made of unused pallets
- **New sign boards** along the school gate: drive slow, no parking on footpath

2. First project in the Pacific: South Tarawa, Kiribati

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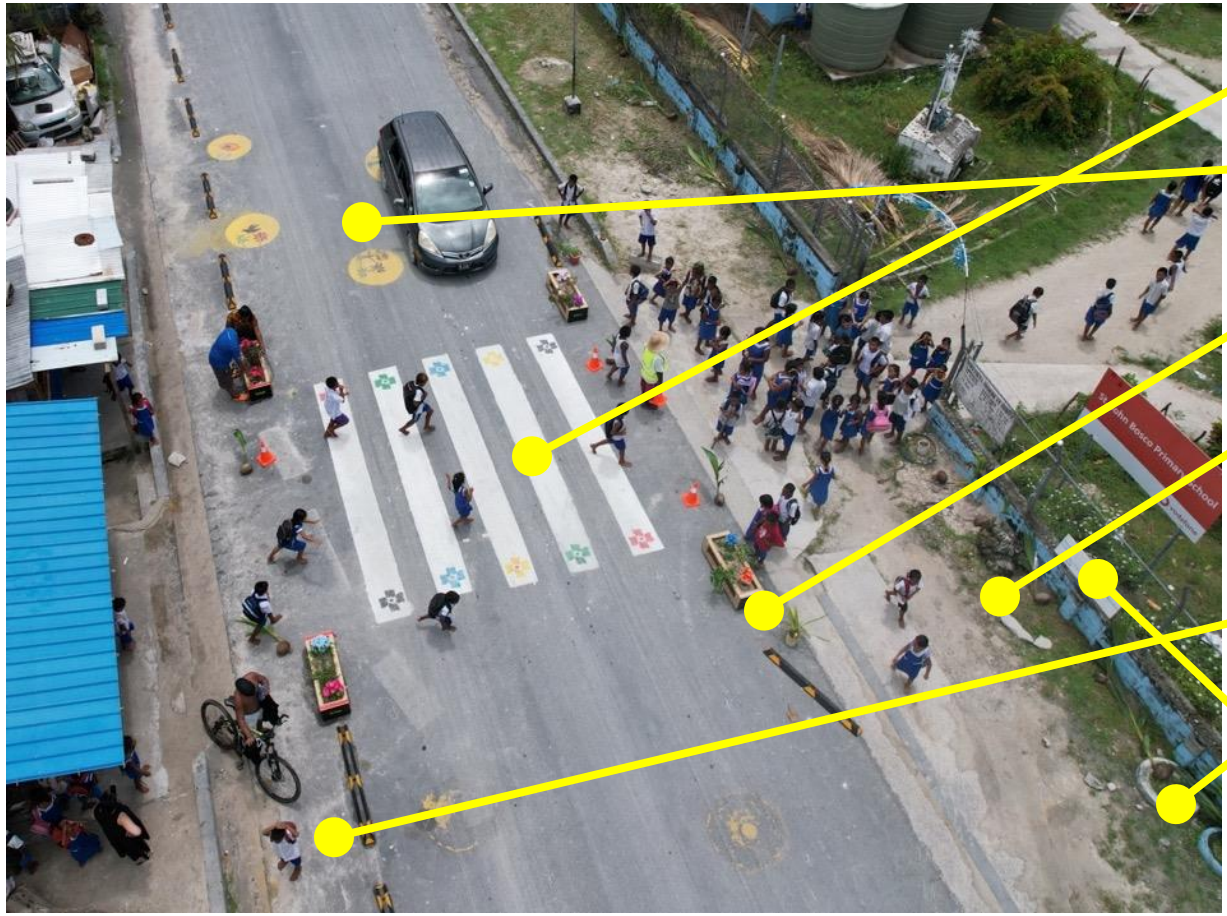

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2. First project in the Pacific: South Tarawa, Kiribati

Process led and delivered by World Bank and the St. John Bosco Primary School, in cooperation with local authorities (Kiribati Land Transport Authority (KLTA) and Betio City Council (BTC))






2. First project in the Pacific: South Tarawa, Kiribati

Key Project Figures:

- Implementation: 4 hours
- Planning and preparation: 6 weeks
- Material costs: US$ 2,200
- Average traffic speeds from 34.7 to 19.7km/h
- Cars yielding to students from 9% to 81%
- Students' perceived safety from 1.2% to 100% (based on 600 survey respondents)

2. First project in the Pacific: South Tarawa, Kiribati

In preparation, students designed crosswalks and road pavement patterns, which were made into stencils.

2. First project in the Pacific: South Tarawa, Kiribati

Upon completion, artists delivered a performance for the students and a party was held.

2. First project in the Pacific: South Tarawa, Kiribati

1. PREPARATION

- Obtaining **approval** from **Betio Town Council**
- Obtaining **approval** from **KLTA** for street closure during implementation
- Obtaining **approval** from the **Ministry of Education** to allow students to participate during school hours
- **Stakeholder consultation** with affected car owners and businesses, in cooperation with BTC
- **Purchasing, fabrication, rental and transport** of materials and tools for implementation
- Preparation of a **work plan** with **tasks** for each team member, including school team: principal, teachers, school committee, students
- **In-class street design session** with students
- **Road safety assessment**
- Pre-implementation **traffic surveys** on traffic and pedestrian volumes, crossings and yielding
- **Photo and video documentation** at pre-implementation stage
- Preparation of an **environmental and social impact mitigation plan**
- Preparation of **school survey** on project appreciation and students' travel behavior

2. IMPLEMENTATION

- **Preparation of team**, repeating plan, tasks, responsibilities
- **Street closure** by KLTA
- **Implementation of the measures** by school students, volunteers and World Bank team
- **Photo and video documentation** of the implementation
- **Re-opening of the street** by KLTA

3. POST-IMPLEMENTATION

- **Photo and video documentation** of the implemented project
- Post-implementation **traffic surveys**
- **Celebration** with musicians & performers
- **School survey** on project appreciation and students' travel behavior

3. Opportunities for Tactical Urbanism

Creation of footpaths through road narrowing and/or removal of (illegal) on-street parking

Footpath creation outside a school in Istanbul

Source: Marmara Municipalities Union (2024)

Footpath creation in Belo Horizonte, Brazil

Source: Global Designing Cities (2022)

3. Opportunities for Tactical Urbanism

Creation of a bicycle lane by freeing up road space from vehicle lanes and parking.

3. Opportunities for Tactical Urbanism

Intersection improvements in Porto Alegre, Brazil. Paint, traffic cones and planters create a small roundabout and footpaths are extended. Traffic speeds drop and crossings become much safer.

Source: WRI Brasil

3. Opportunities for Tactical Urbanism

Creation of roundabouts to improve road safety at an intersection – Tucson, US

Source: Scott Griessel

3. Opportunities for Tactical Urbanism

Road paint and planters are used to create horizontal deflections that cause traffic to slow down.

Source: WRI Brasil

Traffic calming on this street in Brazil is achieved through the narrowing of the street. The footpath is widened with paint and flexible bollards.

Source: ArchDaily

3. Opportunities for Tactical Urbanism


Source: WRI Brazil

Public spaces with seating, landscaping and playgrounds can turn (derelict) parking into vibrant urban spaces, serving far more people


Source: Canberra.bike


Source: Valentina Croci


Source: City of Hobart

3. Opportunities for Tactical Urbanism

Temporary street closures (e.g. Sundays, evenings)

Kids' activities on a street in Porto, Portugal

Monthly street market in Suva, Fiji

4. Tactical Urbanism in the Pacific

Example of an intersection treatment in Tongatapu: Taufa'ahau (Airport) Road – Salote Road

4. Tactical Urbanism in the Pacific

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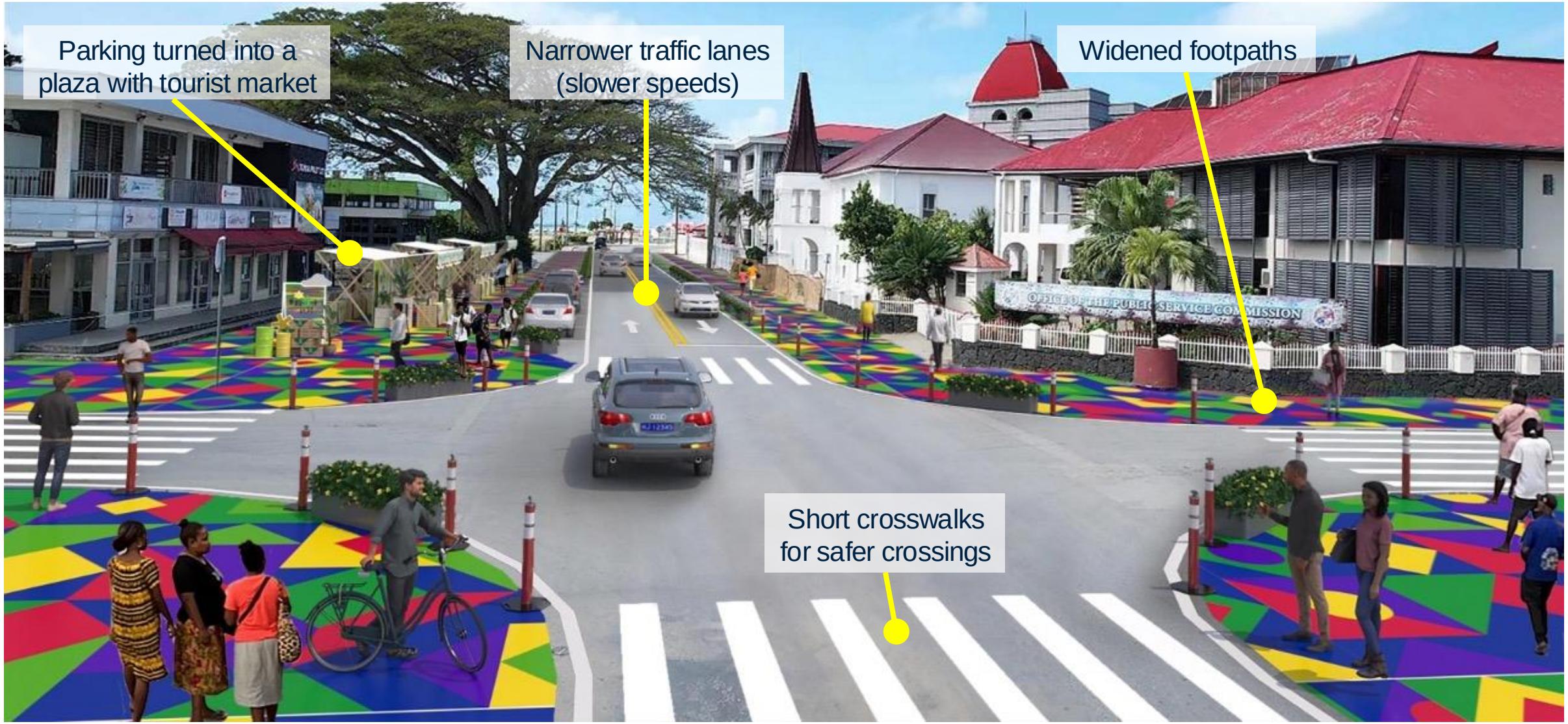


4. Tactical Urbanism in the Pacific

Honiara, St. Nicholas Anglican College Early Childhood Care Education

4. Tactical Urbanism in the Pacific

Quick, cheap and easy option

- Bollards prevent parking/stopping at entrance
- Road narrowing slows traffic
- Crosswalk improves visibility and traffic priority

Honiara, St. Nicholas Anglican College Early Childhood Care Education

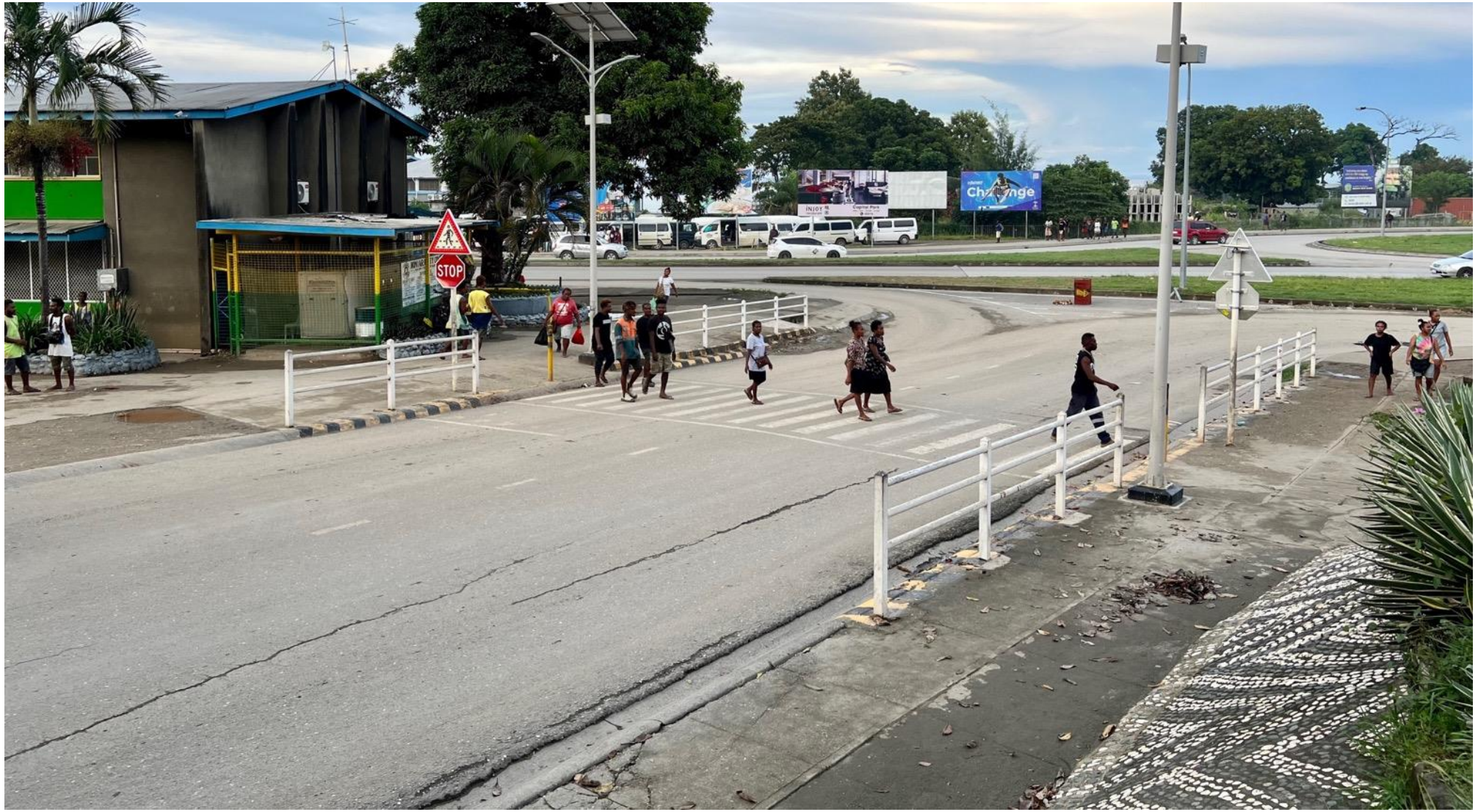
4. Tactical Urbanism in the Pacific

Marks Street // Renwick Road, Suva, Fiji

4. Tactical Urbanism in the Pacific

Marks Street // Renwick Road, Suva, Fiji

4. Tactical Urbanism in the Pacific

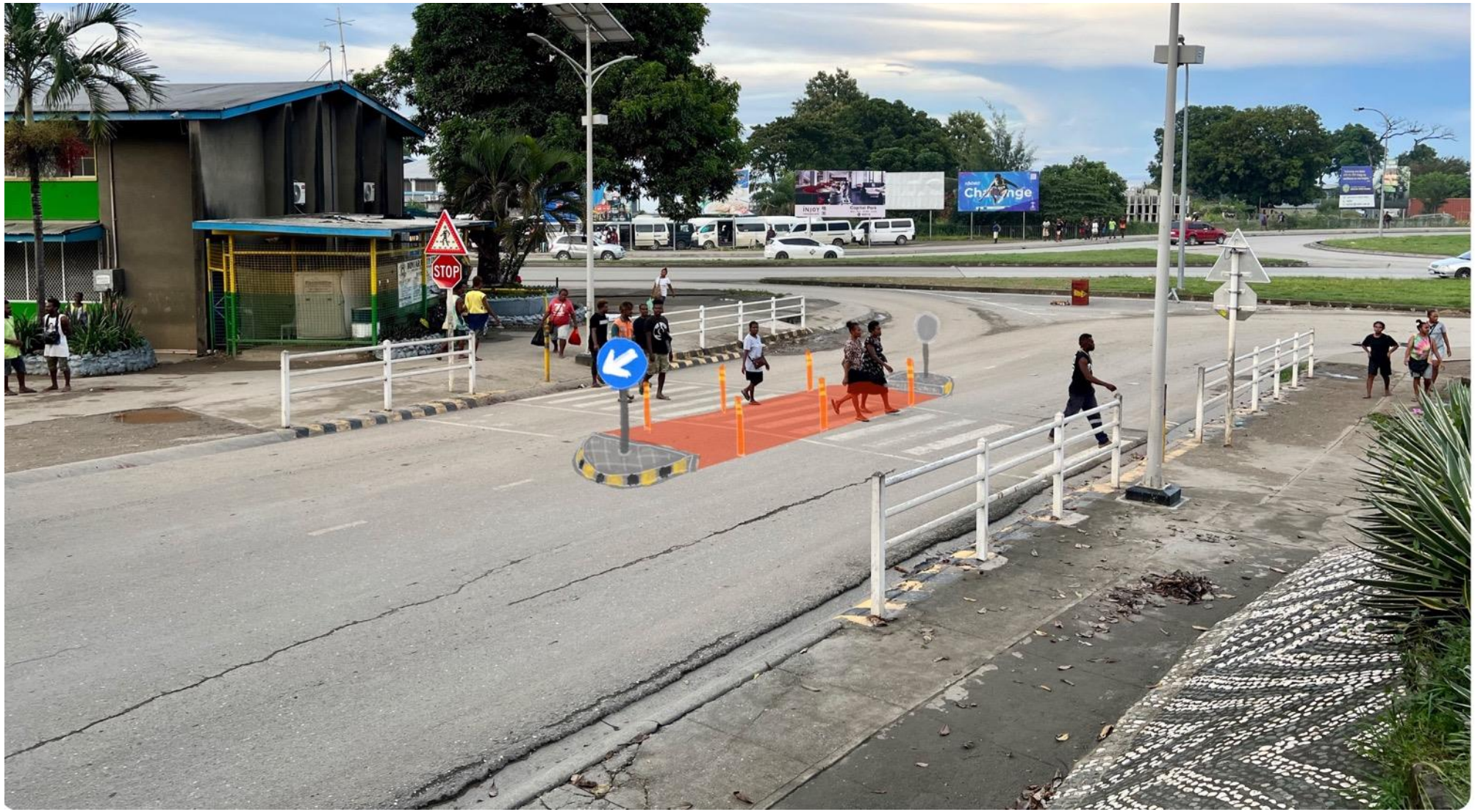


9-meter crossing of two lanes is too long

Traffic STOP signs are insufficient. Street design needs to enforce desired traffic behavior

Honiara, Mbokonavera Rd

4. Tactical Urbanism in the Pacific



Pedestrian refuge island (>2.0m) improves crossing safety

Honiara, Mbokonavera Rd

4. Tactical Urbanism in the Pacific

Tongatapu,
Airport Rd

4. Tactical Urbanism in the Pacific

Lane narrowing, bicycle lane, trees, public seating and amenities

Tongatapu, Airport Rd

4. Tactical Urbanism in the Pacific

Example of a street improvement in Tongatapu: Taufa'ahau (Airport) Rd

4. Tactical Urbanism in the Pacific

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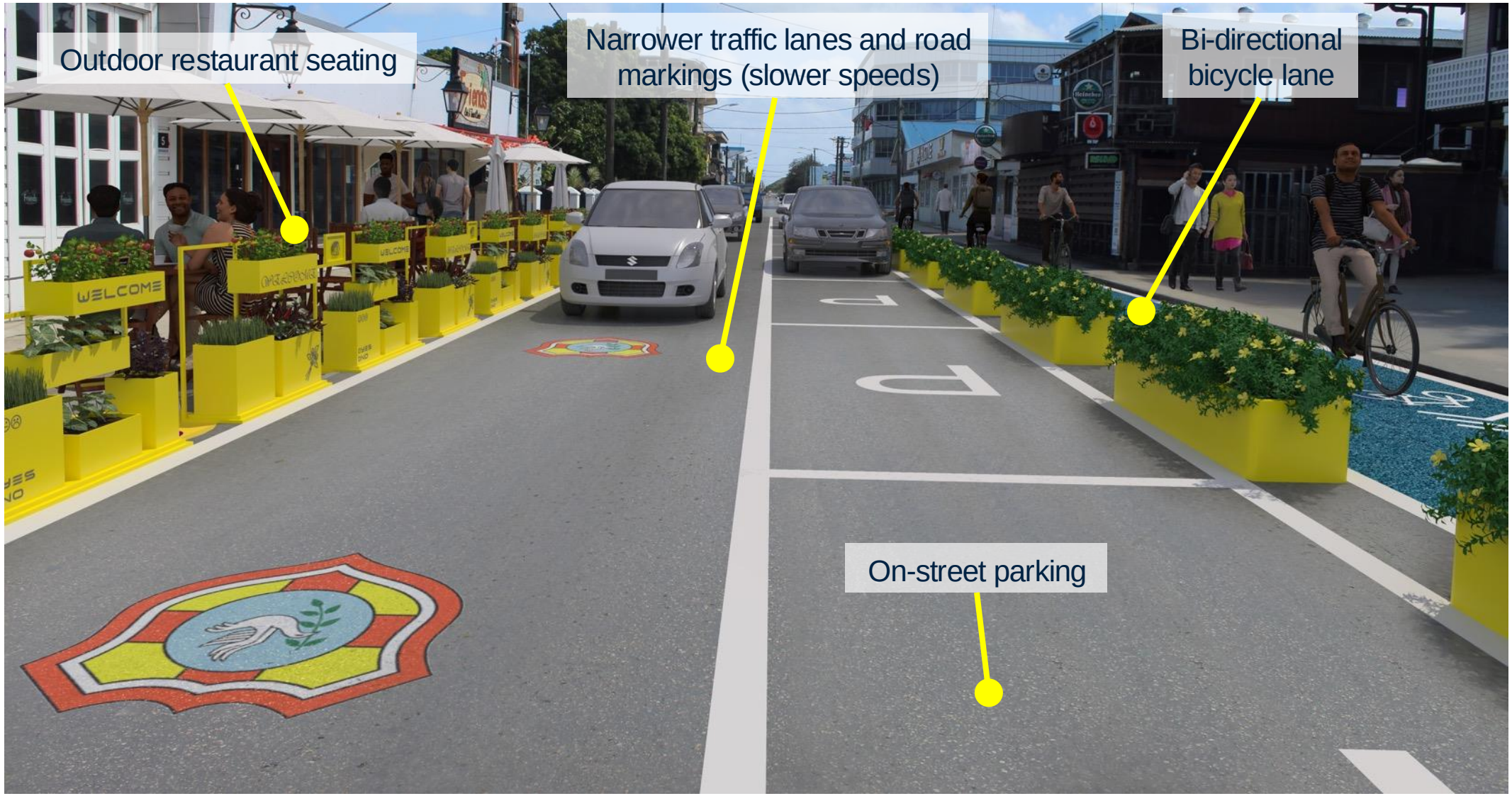


4. Tactical Urbanism in the Pacific

Honiara, Kukute Street
New Hope Academy
Primary & Secondary

4. Tactical Urbanism in the Pacific

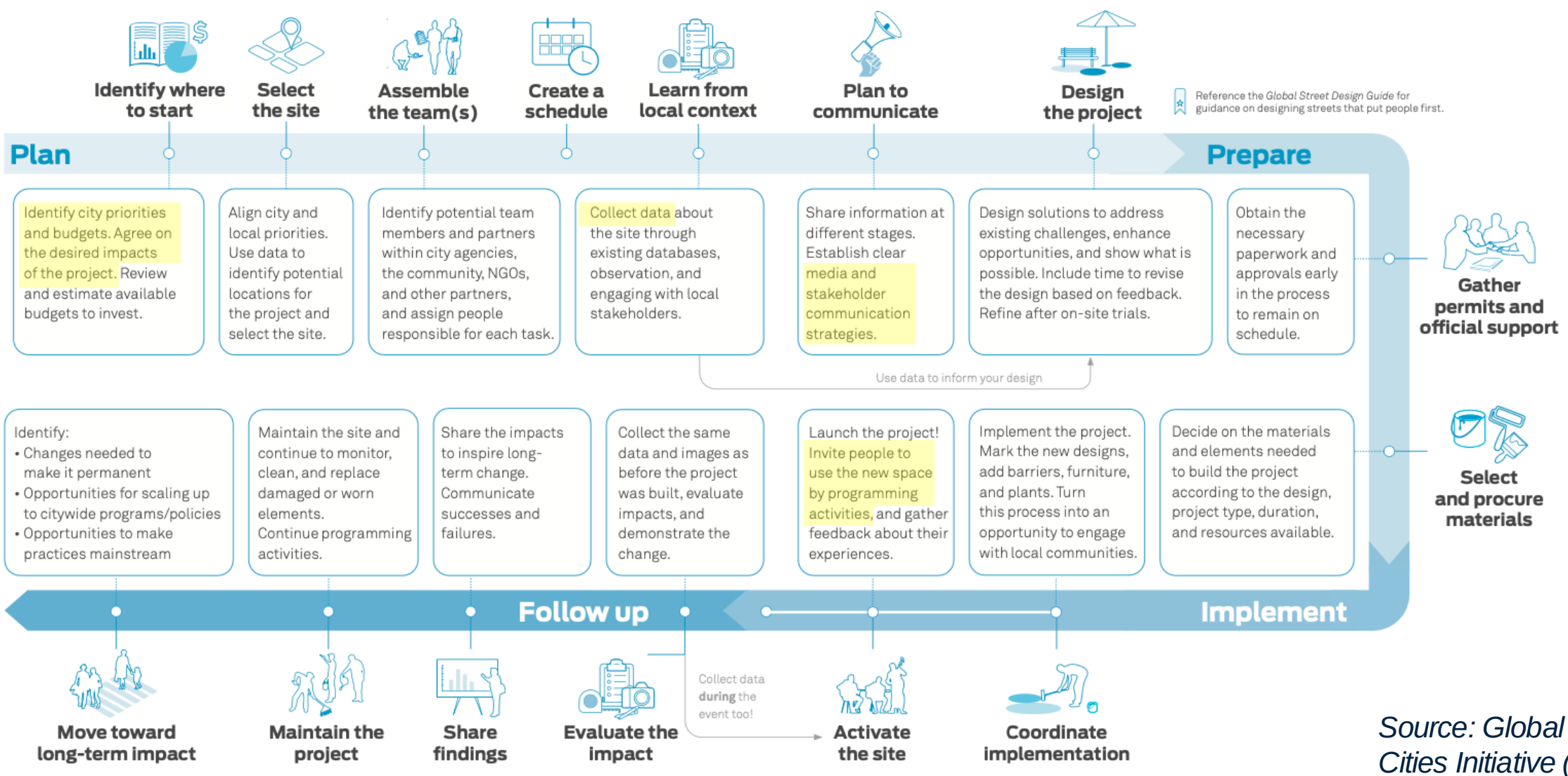
Traffic lane narrowing, shared street, covered drain, planter boxes, play spaces, cover

Honiara, Kukute Street
New Hope Academy
Primary & Secondary

5. Getting it Done

	TACTICAL URBANISM PROJECTS	TRADITIONAL PROJECTS
Priority	People-first	Vehicles-first
Materials used	Lighter, cheaper, easier to move, but less durable	Heavier, more expensive, fixed and more durable
Capital costs	Minimal	Tens to hundreds of times the cost of tactical urbanism
Construction time	Hours to days to weeks	Months to years
Flexibility	Easy, quick and cheap to make changes when designs turn out to be suboptimal	No flexibility; once completed it is there for decades
Community input in design	Local initiatives and concerns feed into the design process. High acceptance of community.	Technical specialists who only consult with community
Community role in delivery	Engagement of local creative sector, involvement of community in development and volunteers in delivery	Traditional procurement, with little emphasis put on community growth or local suppliers
Communication	Public dialog focused on testing and adapting, permission to try, innovation	Seeking acceptance of permanent solution
Degree of certainty	Acceptance and recognition of uncertainty. Low-risk trials, with potentially a high reward	Perception that outcomes are fully understood and an expectation that the project will achieve them
Skill-sets required	Community development, place-making, design-thinking, facilitation, marketing	Transport planning, engineering, public consultation, road safety auditing, business case writing
Knowledge development	Building of organizational capacity between community groups, public/private institutions, non-profits/NGOs	Focus on learning and building capacity between client and consultant teams

5. Getting it Done

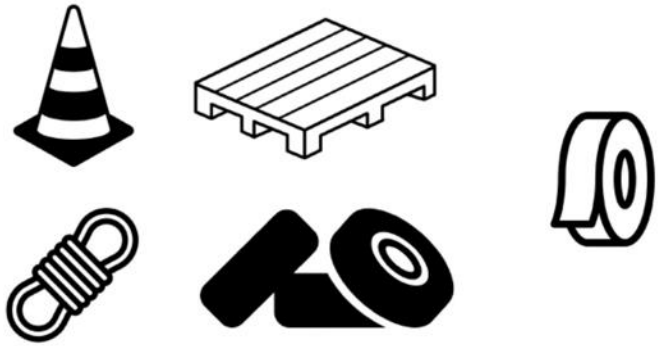


Source: Global Designing Cities Initiative (2022)

5. Getting it Done

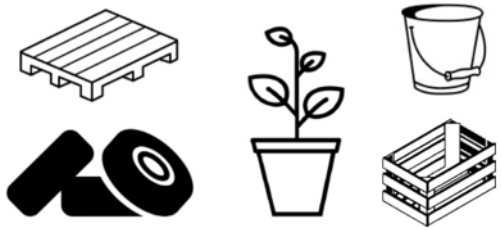
Source: GIZ

ROW demarcation



- Traffic cones
- Delineators
- Jersey barricades
- Traffic buttons
- Pavement markers
- Nylon ropes
- Wooden pallets
- Tyres
- Floor marking tape
- Duct tape
- Reflective tape

Seating livability

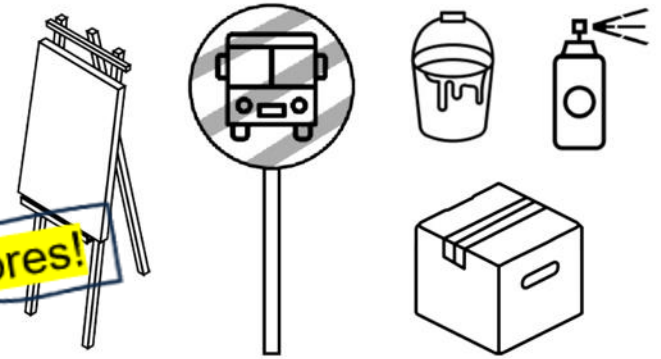


- Wooden Pallets
- Tyres
- Wooden Crates
- Buckets/ Used paint buckets
- Flower pots/ plants

Surface marking

- Acrylic distemper paint
- Floor coat emulsion paint
- Water based epoxy paint
- Thermoplastic paint
- Spray paint

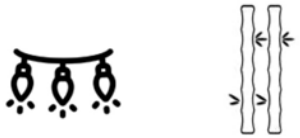
Signage



- Acrylic distemper paint
- Thermoplastic paint
- Spray paint
- Reflective boards
- Easels
- Mill board/ MDF board
- Cardboard

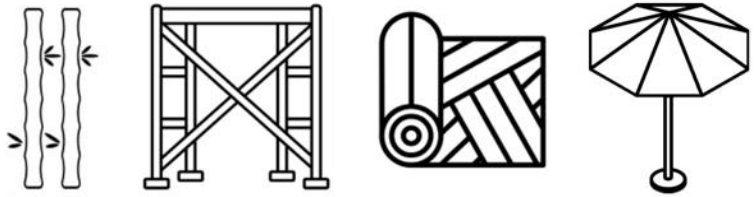
Mostly available at local hardware stores!

Lighting



- LED lights
- Bamboo Poles
- Casuarina Poles
- Serial Sets

Shade structures



- GI/ Steel pipes
- Bamboo Poles
- Casuarina Poles
- Fabric
- Canvas
- Reed/ Cane mats

6. Way Forward

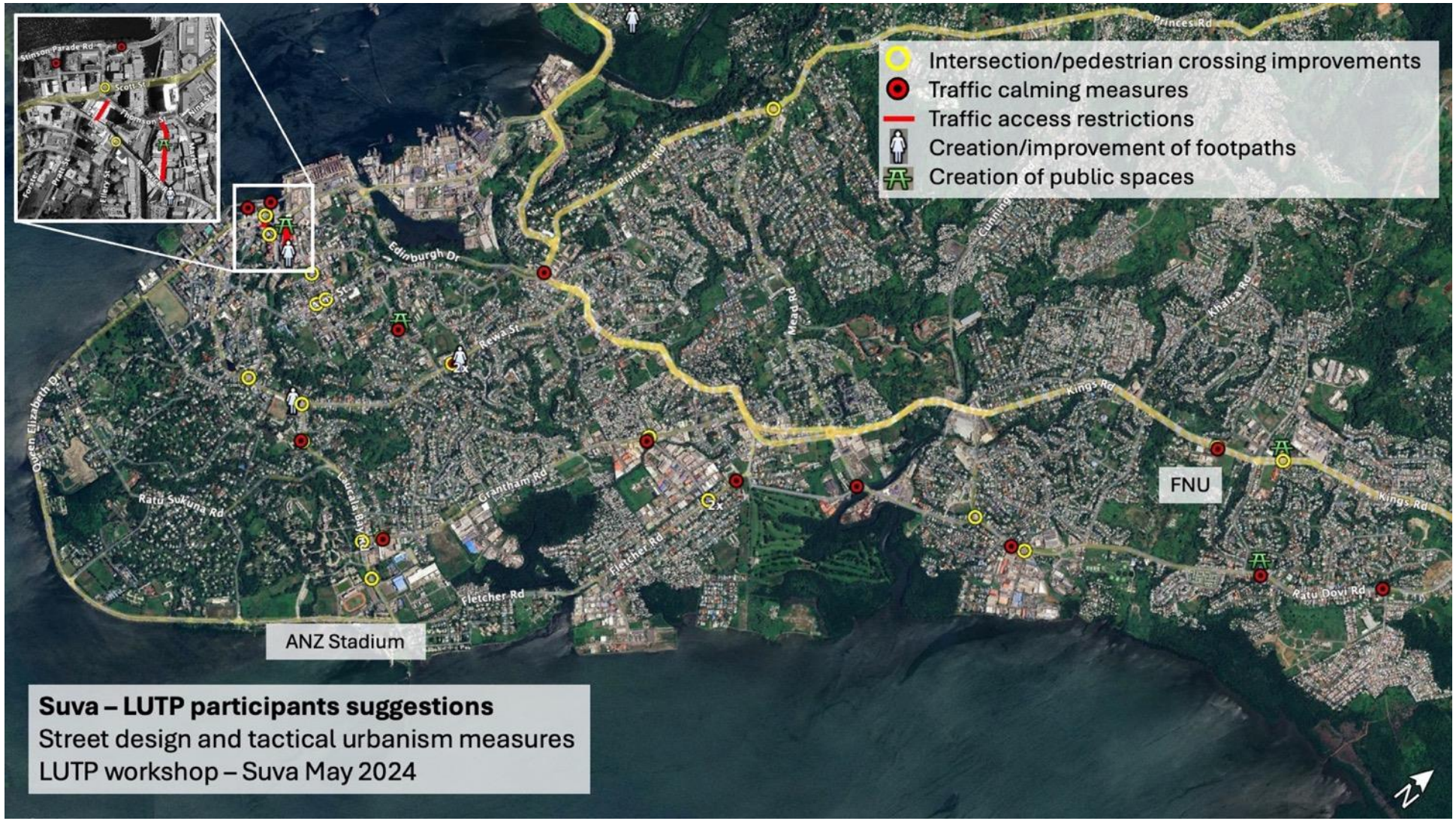
Types of projects:

1. Pedestrian walkways
2. Bicycle lanes
3. Intersection and crossing treatments
4. Traffic calming
5. Plazas and parklets

Most applicable locations:

- School areas
- Commercial areas: markets, shopping streets, CBD
- Residential neighborhoods

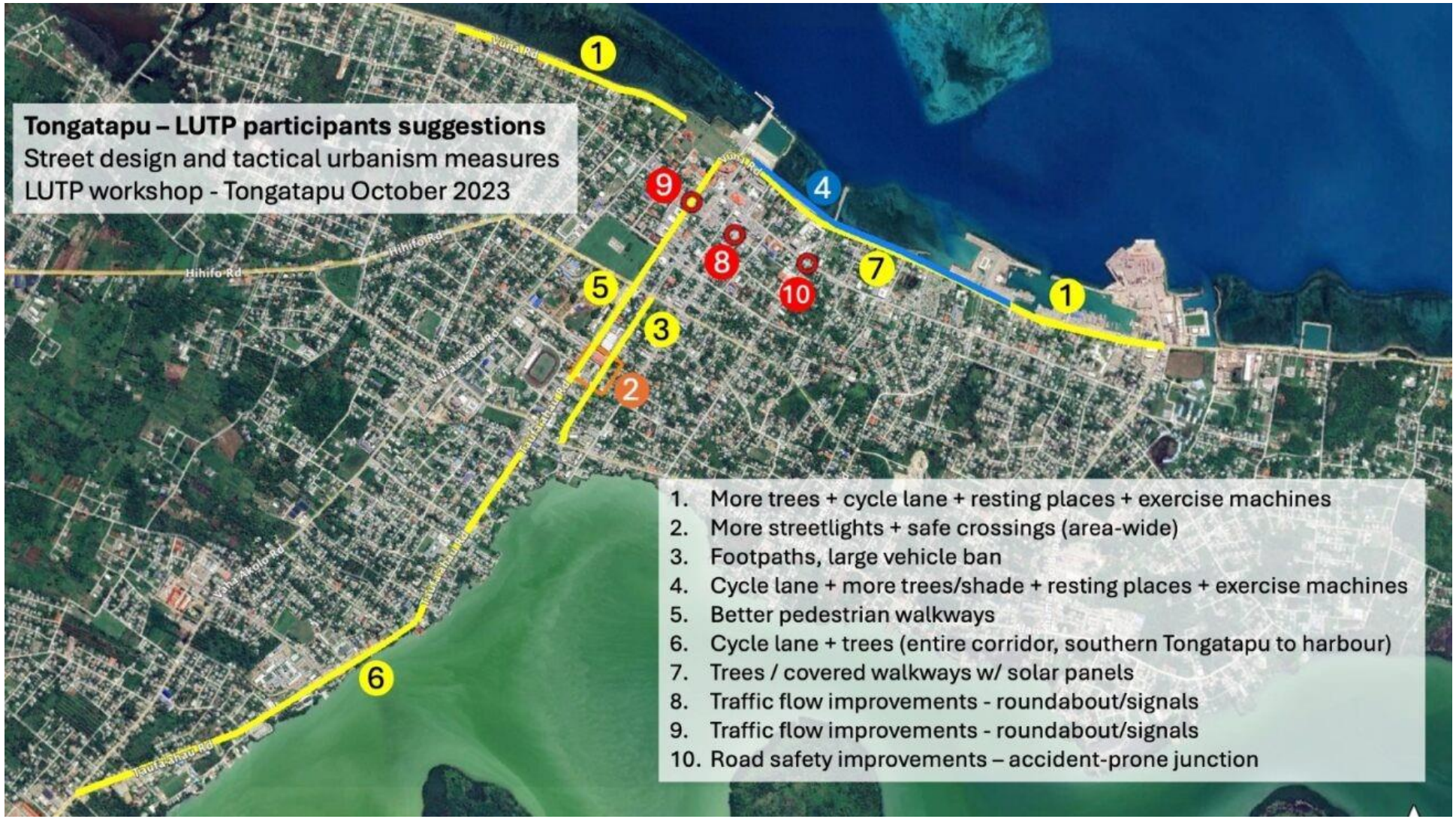
6. Way Forward



Suva, Fiji

Workshop participants in Suva identified numerous locations for tactical urbanism measures

6. Way Forward



Tongatapu, Tonga

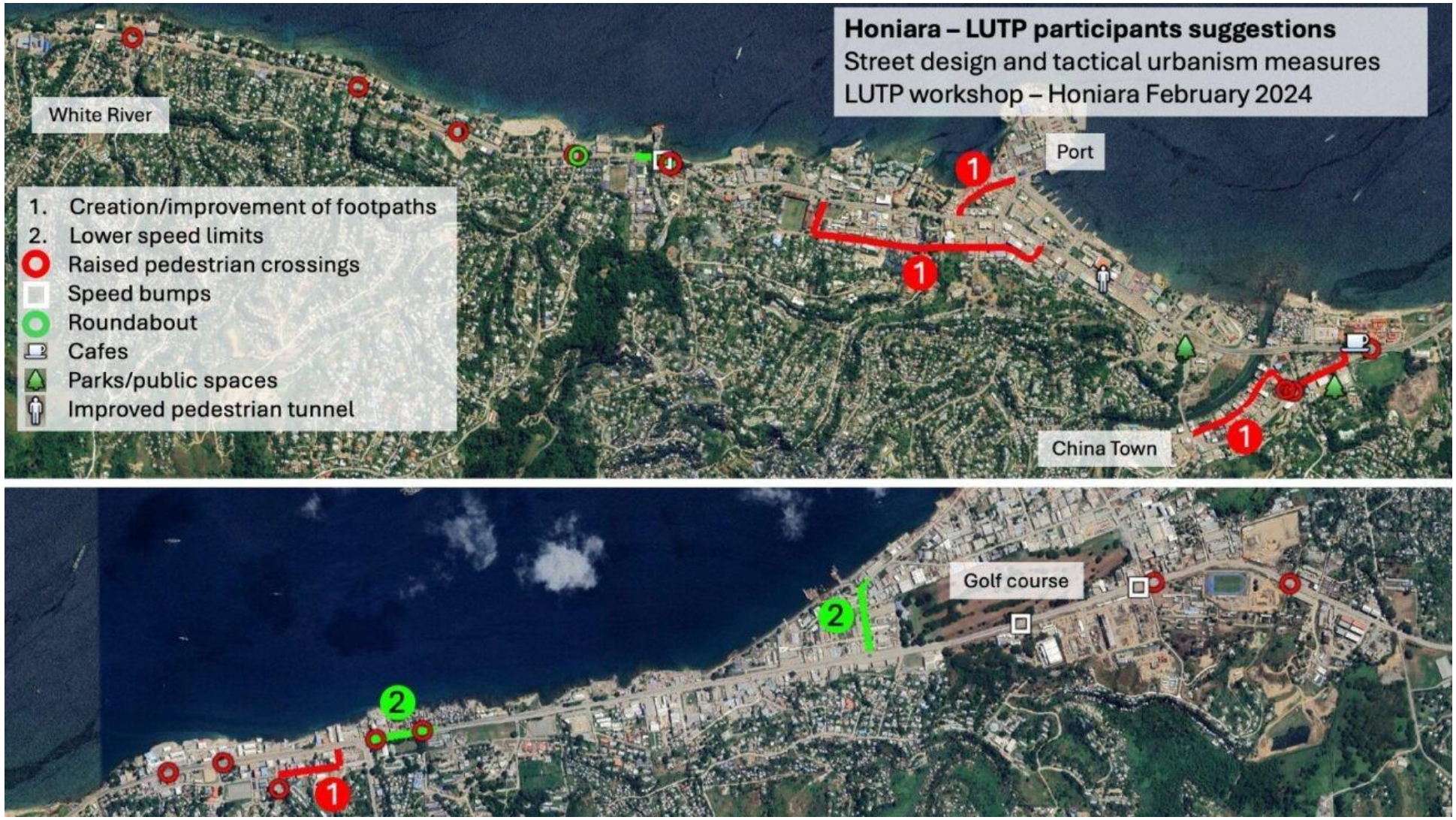
Workshop participants in Tongatapu identified numerous locations for tactical urbanism measures

6. Way Forward

South Tarawa, Kiribati

Workshop participants in South Tarawa identified numerous locations for tactical urbanism measures

6. Way Forward



Honiara, Solomon Islands

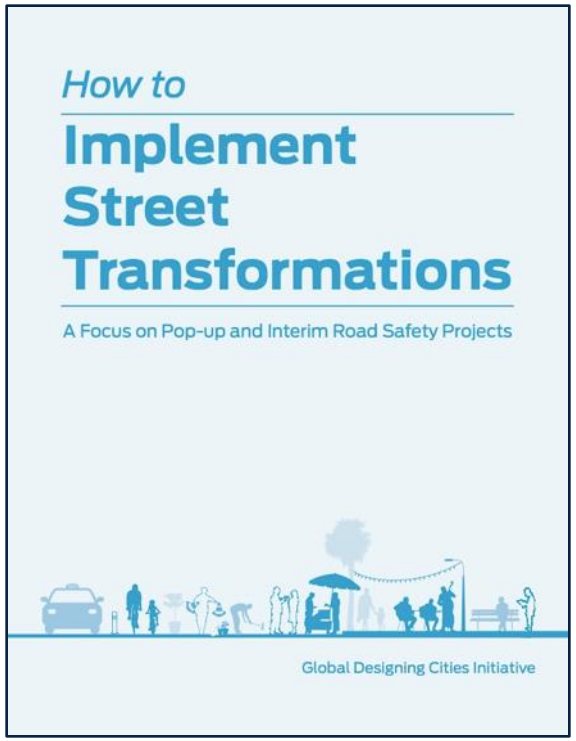
Workshop participants in Honiara identified numerous locations for tactical urbanism measures

6. Way Forward

Possible partners / projects:

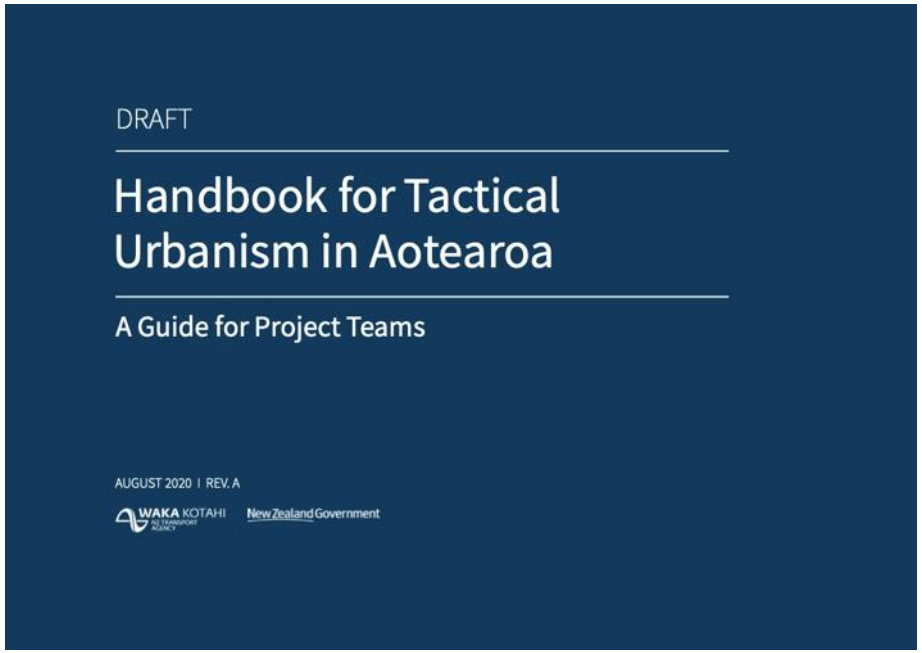
- **Schools** – 'Streets for Kids' Program
- **Chamber of Commerce** – commercial revitalization plans, car-free days
- **Ministry of Education** – partnering in a possible School Streets Program
- **Ministry of Tourism** – improvement of streetscapes around ports and tour sights for enhanced tourism appeal
- **Churches**
- **Development partners**:
  - Funding for standalone tactical urbanism projects
  - Incorporation of street improvements as part of school (re-)construction projects
  - Use of tactical urbanism in the testing of large-scale infrastructure improvements
- **Waka Kotahi**, New Zealand have an extensive (incl. online) training and capacity building program for cities

Further Reading - Tactical Urbanism



Global Street Design Guide (2022) – by Global Designing Cities Initiative. Practical guide with designs, step-by-step manuals, and best practice examples and inspiration.

Download for free here



Handbook for Tactical Urbanism in Aotearoa (2020) – by Waka Kotahi, NZTA. Practical guide with designs, design toolbox, examples and inspiration.

Download for free here

Tactical Urbanist's Guide to Materials and Design (2016) Street Plans Collaborative. Practical guide with designs, design toolbox, material guide and lots of examples and inspiration.

Download for free here

Questions & Discussion

Please raise your questions, concerns, challenges and ideas.

Thank you!

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