



Pacific Region
Infrastructure Facility

Guide to National Infrastructure Investment Plans

Community of Practice Event

7 December 2022

Objectives of this Session



- 1 Present a broad overview of the new NIIP Guide;
- 2 Share some insights from recent NIIPs; and
- 3 Answer any questions you may have.



Evolution of NIIPs

10 years across 12 countries

Phase I (2010-2013)	Phase II (2014-2016)	Phase III (2017-2020)	Phase IV (2020-2023)
<ul style="list-style-type: none"> ▪ Tonga NIIP ▪ Nauru NEISIP ▪ Samoa NISP ▪ Tuvalu TISIP 	<ul style="list-style-type: none"> ▪ Tonga NIIP Review ▪ Nauru NEISIP Review ▪ Samoa NISP Review ▪ Cook Islands NIIP ▪ Vanuatu VISIP ▪ RMI NIIP Framework ▪ Samoa Transport Medium-term Economic Framework 	<ul style="list-style-type: none"> ▪ Tonga NIIP Update ▪ Nauru ISIP Update ▪ Cook Islands NIIP Update ▪ Tuvalu ISIP Update ▪ Tuvalu Asset Management Framework ▪ Solomon Is. Public Investment Management Diagnostic ▪ Solomon Is. Priority Investment Plan ▪ Fiji Asset Management Framework ▪ Kiribati Public Investment Management Assessment ▪ Niue Transport Sector Plan 	<p>A comprehensive Program of NIIPs ongoing:</p> <ul style="list-style-type: none"> ▪ Tuvalu ▪ Tonga ▪ Palau ▪ Cook Islands ▪ Kiribati ▪ Fiji ▪ Solomon Islands ▪ Samoa ▪ Vanuatu

1 Overview of the Guide

Infrastructure is fundamental to the services governments provide to the public...

ROADS



Efficient transport network to move people and goods

WATER



Safe and reliable access to drinking water and sanitary services

ENERGY



Access to sustainable and reliable energy supply

PORTS



Efficient movement of goods and produce internationally

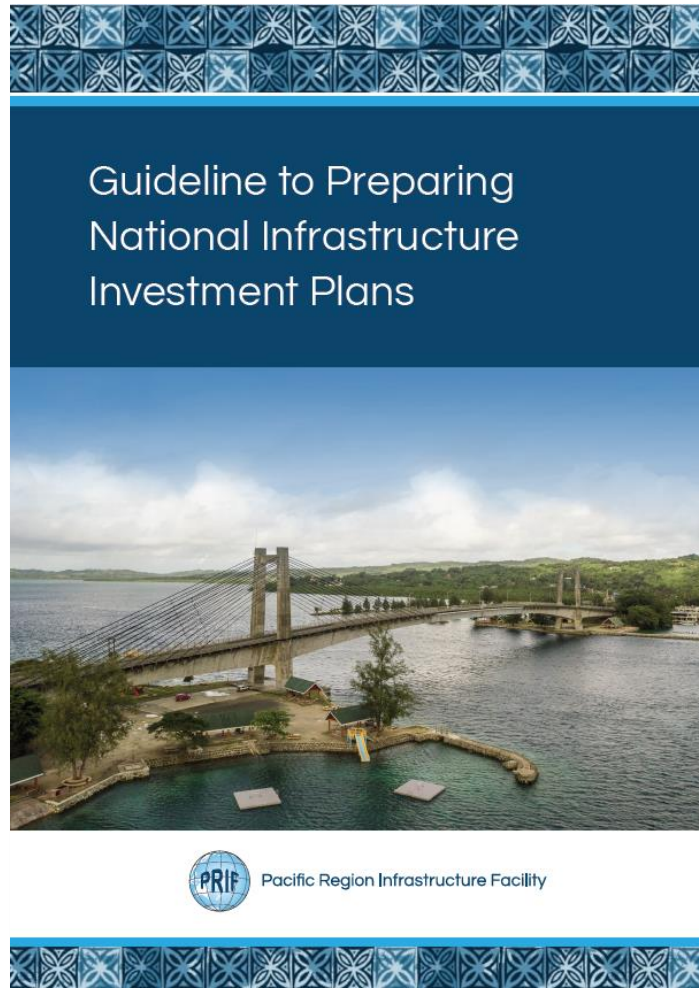


Infrastructure agencies are **capital intensive** entities

Typically defined as Capital Intensity Ratio > 5 (i.e. fixed assets > 5x revenue)

-> Need for **longer-term planning horizons** and sound **asset management** practices

To assist agencies prepare capital investment plans PRIF has recently released a new Guideline



The target audience for the publication will be PIC governments and their technical advisers, who are looking to develop or improve their multi-sector investment planning through use of this framework.

The publication is intended as a useful reference for those involved in preparing, reviewing or updating capital construction investment programs around the Pacific, as a means of identifying and encouraging recourse to best practice in infrastructure investment planning.



There are 3 Sections to the Publication

Section I:

Introduction to Infrastructure Investment Planning

Section II:

The Investment Planning Framework

Section III:

Best Practice Approach to Developing the Plans



SECTION I Introduction to National Infrastructure Investment Planning

This section of the document presents a high-level summary of why multi-sector, multi-year investment plans for infrastructure are important and answers some of the typical questions governments and infrastructure agencies have when embarking on the NIIP development journey.

This section answers the following questions:

- 1.1 What is a National Infrastructure Investment Plan?
- 1.2 Where do NIIPs fit within the infrastructure delivery life cycle?
- 1.3 What benefits can you expect to see?
- 1.4 How will the approach help you deliver more robust planning decisions?
- 1.5 How does the plan help you build resilience?
- 1.6 Where have Infrastructure Investment Plans been delivered?
- 1.7 What value have participants experienced?
- 1.8 What is required to improve the infrastructure planning process?

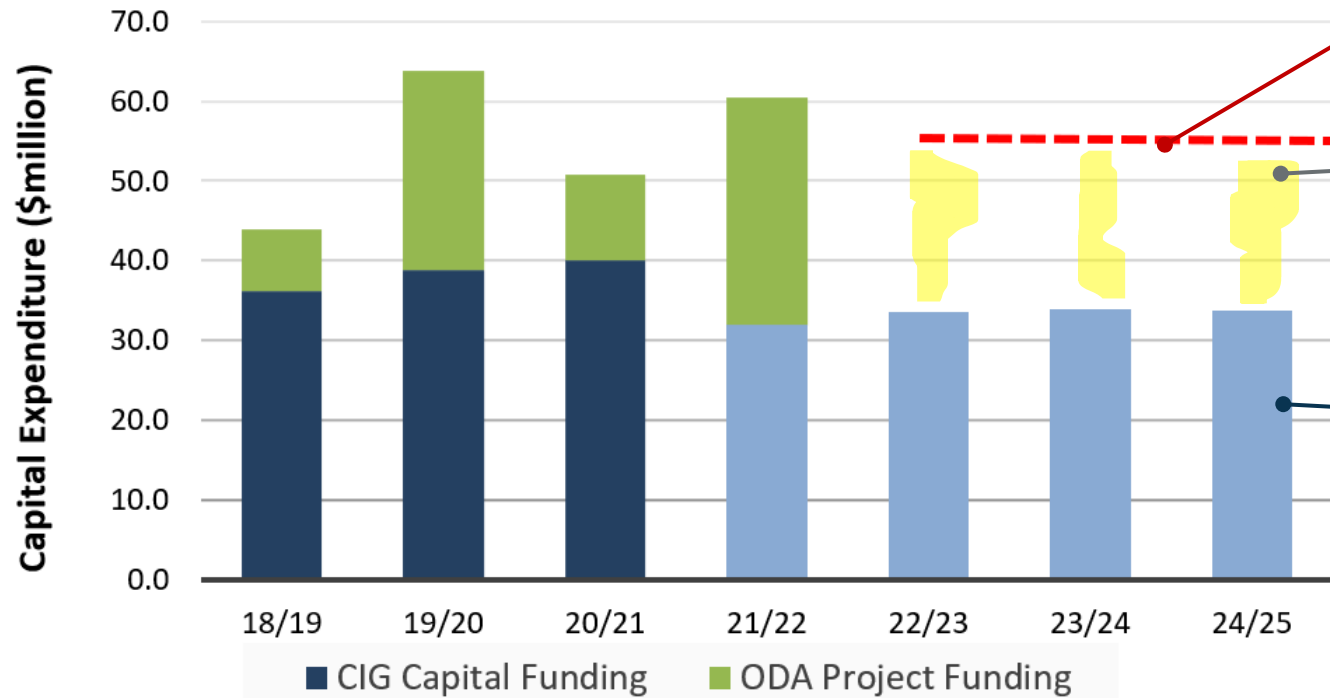


Summary of why infrastructure investment plans are important. Answers to some of the **typical questions** governments and infrastructure agencies have when embarking on the NIIP development journey. It will provide a **resonant case for adoption**.

Infrastructure Planning in one Graph



Table III.2. Example of Capital Expenditure Analysis (Historic and Committed)



Forecast threshold for capital construction set in MTFF (top down)

Prioritised pipeline of future investments and funding strategy

'Funded' commitments (bottom up)

The Infrastructure (Capital Construction) Investment Planning framework helps us link these things together...

CIG = Cook Islands Government, ODA = Overseas Development Assistance

Source: Ministry of Finance and Economy, 2021-25 Budget Book, Government of Cook Islands

SECTION II The Infrastructure Investment Planning Framework

This section introduces terms and definitions and summarizes the core elements of the multi-sector, multi-year investment planning process to be elaborated on in Section III.

This section includes:

- II.1 Core Elements of the Investment Planning Process
- II.2 Projects and Sectors for Inclusion
- II.3 Plan Layout and Content

Introduction to **key terms and definitions** and provide a summary of the **core elements** of the multi-sector, multi-year investment planning process to be elaborated on in Section III.



Typical Sectors and Asset Classes in a NIIP



Typical steps to develop a NIIP



1.3 Process Steps for Formulating a NIIP

Based on a review of past NIIPs, the formulation of a NIIP can be described in eight key steps.

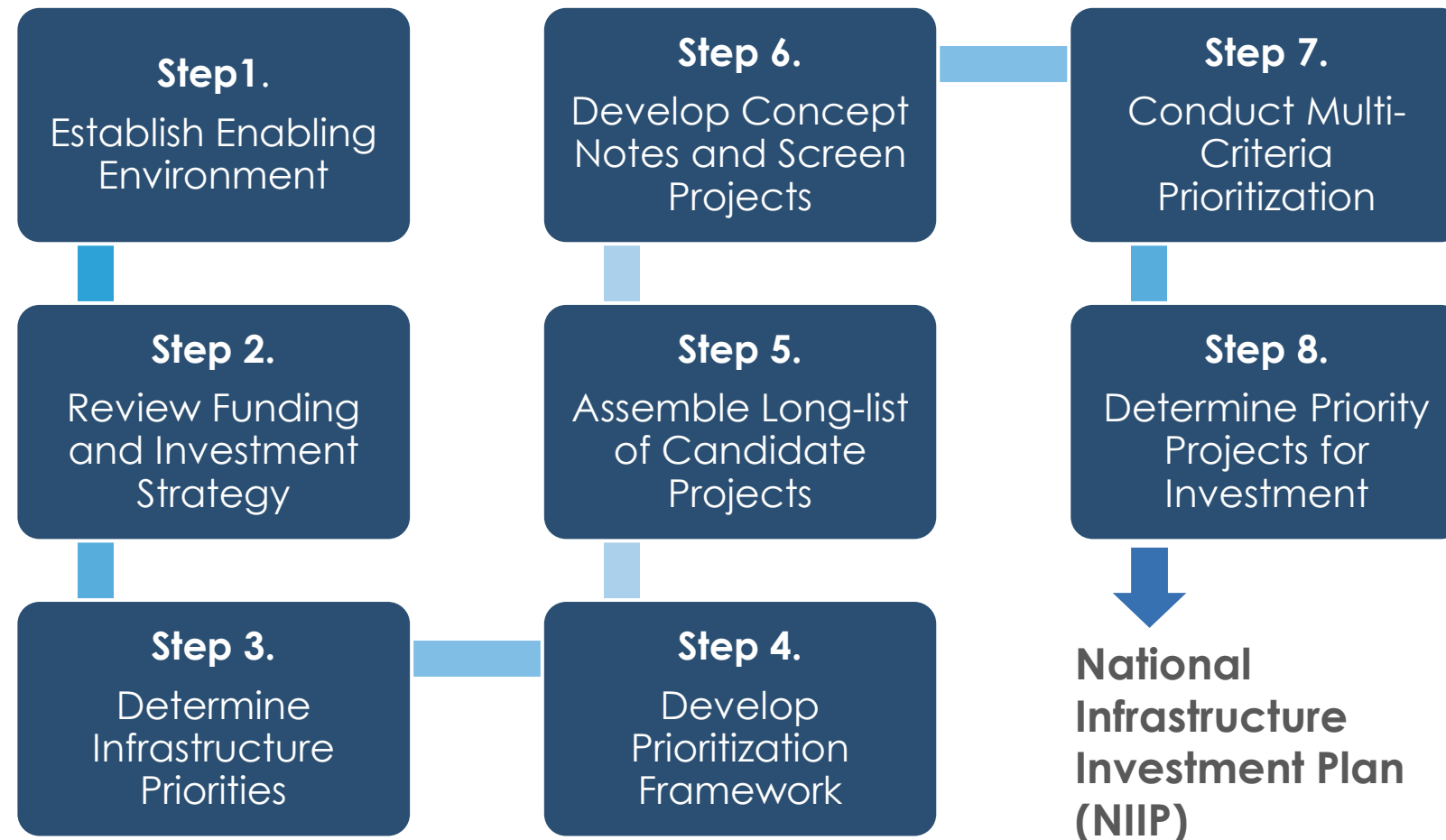
Table II.3. The eight steps to formulate a National Infrastructure Investment Plan

Step	Step Name	Key Activities
Step 1	Establish Enabling Environment	<ul style="list-style-type: none"> Define role of NIIP in project planning lifecycle Establish governance environment
Step 2	Review Funding and Investment Strategy	<ul style="list-style-type: none"> Review economic environment Identify sources of funding Assess historic investment levels Determine investment strategy and funding thresholds Establish linkages to the budget cycle
Step 3	Determine Infrastructure Priorities	<ul style="list-style-type: none"> Assess implications of National Development Strategy(s) and policy direction Assess implications of sector, corporate, and asset level plans Identify and address any gaps in coverage by sectors (sector overviews)
Step 4	Develop Prioritization Framework	<ul style="list-style-type: none"> Set up the Multi-Criteria Analysis (MCA) framework Identify core assessment criteria to reflect national development objectives, economic/environmental/social impacts, and project readiness
Step 5	Assemble Long-List of Candidate Projects	<ul style="list-style-type: none"> Identify and categorise projects Compile project lists Identify any significant gaps in coverage of long list
Step 6	Develop Concept Notes and Screen Projects	<ul style="list-style-type: none"> Categorize infrastructure projects Develop project concept notes Populate project attributes and assess economic viability
Step 7	Conduct Multi-Criteria Prioritization	<ul style="list-style-type: none"> Conduct MCA screening, scoring and sensitivity analysis Review project impact ranking Refine MCA and output program Prepare NIIP Endorse NIIP
Step 8	Ongoing Management	<ul style="list-style-type: none"> Formal approval of projects for funding Taking prioritised projects forward Sustaining the NIIP Mid-term reviews and improvement plan

Source: Authors

Discussion and a best practice approach for each step in the process (above) are included in **Section III** along with case examples extracted from past NIIPs.

It is also useful for the reader to understand where the NIIP fits in the overall process of project implementation from setting the strategic direction for the country and its infrastructure, through to approving projects for construction.



Section III: Best-Practice Approach



SECTION III Best Practice Approach to Developing Infrastructure Investment Plans

The purpose of this section is to provide practitioners and those compiling NIIPs with a knowledge product (best practice guidance) for each step in the process. It presents the knowledge and practices applicable to most countries where there is consensus about their value and usefulness as accepted best practice.

This section provides guidance on the eight key steps (Section II.1.2) of formulating a National Infrastructure Investment Plan, namely:

- III.1 Establish Enabling Environment
- III.2 Review Funding Capacity and Develop Investment Strategy
- III.3 Determine Infrastructure Priorities
- III.4 Develop Prioritization Framework
- III.5 Assemble Long List of Projects
- III.6 Develop Concept Notes and Screen Projects
- III.7 Conduct Multi-criteria Prioritization
- III.8 Ongoing Management



The main **knowledge base** of ‘best practice’. It provides an explanation and background to each core element of the NIIP process including best-practice examples and recommendations on future development where applicable.

The aim is to strengthen the Investment Planning Process



INITIATE

PLAN

1

APPRAISE

2

BUDGET

How does the NIIP improve infrastructure planning...

Provides 5-10 year multi-sector pipeline of project level infrastructure investments and funding strategy.

Implements a transparent, multi-criteria impact assessment and prioritization framework.

Gateway 1
Screening Processes Enhanced

Creates a dossier of investment ready project for budgeting or funding discussion with development partners.

Gateway 2
Improved Appraisal of Projects (developing)

What tools and templates are implemented...

Project Register (Database)

Impact Assessment Form

MCA Analysis Tool

2 Insights (5)

We have been able to...

Transparently screening Investment Ready Projects

Identifying
PRIORITY
Projects

Assemble pipeline

224 projects in database

- + 49 in development budget (\$339m)
- + 46 approved by cabinet (\$699m)
- + 31 approved by DCC (\$723m)
- + 98 planned pipeline (\$1.8b)

Filter Projects (Shortlist)

69 pipeline projects > \$3m

Only pipeline projects >\$3m threshold were considered for evaluation in the NIIP. 24/69 were in discussions with Donors.

Prioritisation (MCA)

45 for Multi-Criteria Analysis

Agencies were asked to then complete benefits assessments for those 'unfunded' >\$3m. In total 30/45 MCA forms were completed.

Priority Project Selection

15 priority projects for cabinet

The top wave of priority projects was selected by DCC using the MCA, considering economic viability, dependencies and readiness.

Project Prioritization Criteria



General

- Reliability and quality of services
- Criticality of the project (urgency)
- Complexity and sustainable operation



Social

- Access to improved social services
- Regional development



Environment

- Resilient to climate change (adaptation)
- Impact on the environment



Economic

- Grow primary industries
- Infrastructure cost efficiency
- Grow private sector and local expertise
- Financial and economic viability

PROJECT LIST

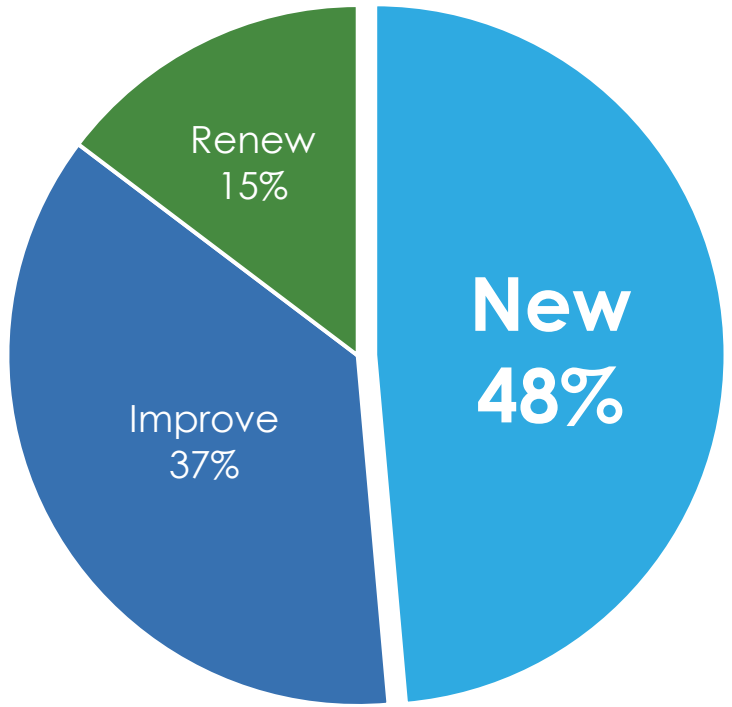
PROJECT LIST	Average Score (Out of 10)				Weighted Score	NEPO Rank
	Perf.	Social	Environ.	Economic		
A119	8.2	7.8	4.5	6.9	6.8	A
W110	7.4	8.5	8.0	4.6	6.8	A
M115	7.2	6.8	7.0	6.1	6.7	
B176	7.3	7.8	5.5	5.1	6.2	A
A108	6.5	6.8	4.5	6.8	6.2	A
W105	7.2	9.5	6.0	3.9	6.2	A
T117	6.8	7.0	3.0	7.4	6.1	
B156	7.0	8.5	6.0	4.4	6.1	B
T115	5.8	10.0	3.3	6.4	6.1	A
R113	7.7	7.0	3.5	5.1	5.7	A
U103	6.2	6.3	4.5	5.3	5.5	B
B190	5.8	9.5	6.0	2.8	5.4	A
M122	7.4	4.8	3.5	5.5	5.4	
M121	7.7	9.3	2.5	3.7	5.3	A
B191	6.5	9.3	3.3	3.7	5.2	
U101	4.5	7.8	1.8	6.7	5.1	
B192	6.1	10.0	3.3	2.9	5.0	
M132	5.1	6.3	3.5	5.2	4.9	
U104	5.6	5.5	3.3	4.9	4.8	B
R120	6.5	4.0	5.5	3.4	4.8	
M105	7.4	4.5	5.0	2.7	4.8	
B102	3.7	5.5	2.5	6.2	4.6	A

2.2

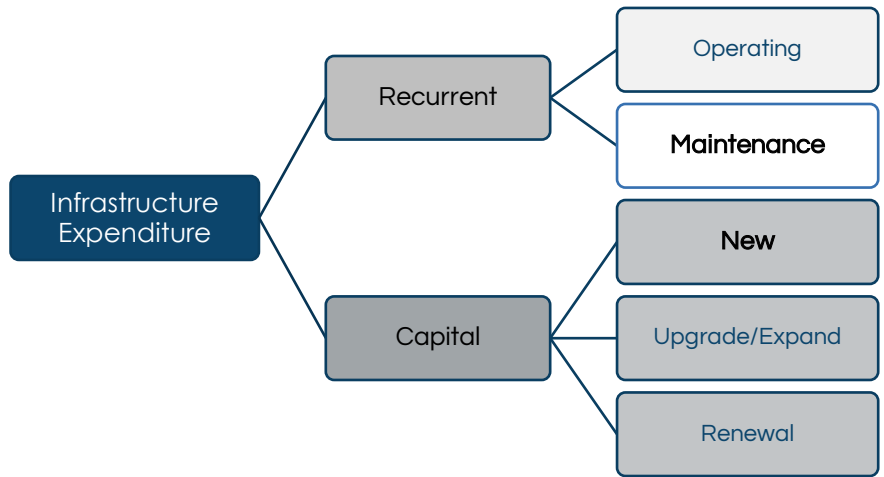
We have been able to...

Raising awareness around whole-of-life costs

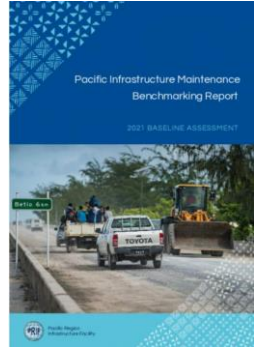
Kiribati National Infrastructure Investment Plan (2022)



\$167m p.a. Capital Construction over next 5 years with **48% New**



2-8%



Capital Construction ~20% of lifetime cost of asset ownership

Government Finances*

REVENUE	OPERATING
\$251m	\$220m
67% <i>Fishing Licenses</i>	40% <i>Wages and Salaries</i>
20% <i>Domestic Taxes</i>	17% <i>Subsidies and Social Benefits</i>

Additional **\$85m in Recurrent Expenditure** over next 5 years

Asset Class	Avg. Annual Maintenance	Avg. Annual Operating
Buildings	0.7-1.5%	7-14%
Aquatic Centre	1.1%	13.9%
Museum	0.6%	9.7%
Commercial	0.8%	7.0%
Roads	2-2.5%	<0.2%
Carparks	2.1%	NR
Bridges	0.5%	NR
Parks and Reserves	5-10%	4%
Plant and Equipment	3-5%	NR

Source: Local Government and Municipal Knowledge Base

2.3

We have been able to...

Facilitate multi-sector engagement and capacity building



- All **infrastructure agencies** working together (20 Kiribati, 24 Fiji).
- **Local consultants** accountable for database, liaison and impact assessment of projects.
- Central **planning unit** responsible for prioritization (supported by enhanced process).
- Multi-sector **steering committee** agreeing priority projects.

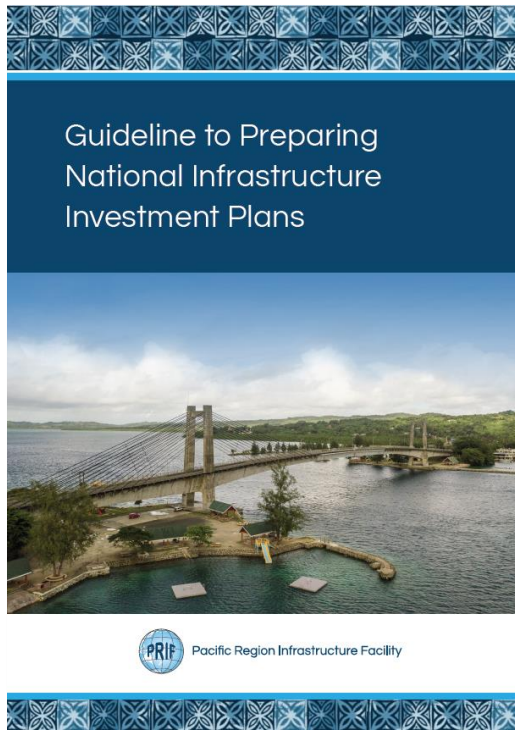
We have been able to...

Mainstream process improvements



- Review existing project management and budgeting processes.
- Determine how NIIP can help strengthen the early-stage screening of projects.
- Ensure the MCA impact criteria reflect priorities set in government's strategic plans.
- Ensure we leave behind tools which are used:
 - Projects Pipeline Database
 - Impact Assessment Form
 - MCA Analysis Tool
 - Screening Note template

Productize the Approach



Building a **knowledge base** and **capacity** around infrastructure planning by:

- Publishing a Best-Practice Guideline
- Establishing a core team for delivering NIIPs
- Running Community of Practice Webinars
- Hosting a NIIP Symposium in 2023
 - *Case studies, knowledge sharing, country led*
- Presenting at regional conferences...

3 Questions / Discussion



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