

Nauru Integrated Infrastructure Strategic Plan

May 2024





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1. Executive Summary

Nauru's Integrated Infrastructure Strategic Plan

Public sector investment aims to enhance societal well-being by addressing social and economic needs through infrastructure projects like roads, bridges, and public transportation, as well as investments in education and healthcare.

The definition of a public sector infrastructure investment project, is one that is > \$100,000 and one that constructs, improves, renews, or maintains infrastructure assets in Nauru. With the important consideration that these assets exist to provide critical services to the people of Nauru. The broad investment types for development projects included in the NIISP and the sectors covered are defined in Table E1 and Table E2 respectively.

The NIISP covers both funded and unfunded development projects. Funded projects include ongoing projects currently being implemented and budgeted projects that are yet to begin. Unfunded projects are yet to secure funding.

Table E1: Sectors covered in the NIISP

Sector	Subsector	Example of physical infrastructure assets
Transport	- Land	Roads, bridges, culverts, signs, lighting
	- Air	Runways, apron, terminals, nav aids, vehicles
	- Maritime	Wharfs, jetties, cranes, vessels, lighting
Utilities	- Water and Sanitation	Treatment plants, sewer lines, pumping
	- Energy	Generator, solar panels, lines, natural gas
	- Telecom and ICT	Telecom towers, networks, fiber landing
Community	- Solid Waste and Reclamation	Collection trucks, heavy equipment
	- Education	School buildings, administration blocks
	- Healthcare and Disability	Hospitals, specialist equip., medical centers
	- Community and Cultural	Museums, libraries, cultural center
Security, Commerce and Public Administration	- Sports and Recreation	Sports grounds, stadium, track
	- Police, Justice, and Border	Prisons, admin buildings, barracks
	- Emergency Services	Ambulance, fire trucks, stations, ES centers
	- Public Administration	Government buildings
	- Coastal and Environment	Seawalls, land reclamation, protection works
	- Commerce and Industry	Processing plant, markets

Source: Department of Infrastructure Development (see Table 2).

Table E2: Investment types included in the PSIP

Project Type	Definition
New (Type N)	New infrastructure, which is greenfield in nature, new public infrastructure, mostly large and development-partner driven.
Rehabilitate (Type R)	Infrastructure rehabilitation, which aims to refurbish infrastructure assets to original design and functionality.
Upgrade / Improve (Type U)	Infrastructure upgrading, which aims to improve similar types of civil infrastructure beyond their original design capacity to meet demand or avoid technical obsolescence.
Equip. Purchase (Type E)	Major plant or specialist equipment purchases such as fire trucks, hospital scanning equipment, heavy earth moving equipment and the likes.
Technical Assist. (Type T)	Consultant studies and designs associated with infrastructure or capital works (e.g. feasibility study, monitoring) or capacity building and workforce training initiatives.

Source: 2019 NISP categories plus new category for consulting and technical assistance (see Table 1).

Screening Investment Projects

An important aspect of the early-stage screening process is the adoption of a robust project prioritization framework. To ensure that the prioritization framework reflects national priorities, the Multi-Criteria Analysis (MCA) utilizes evaluation criteria (Table E3) that align with the high-level goals and objectives of the NSDS.

Table E3: Criteria for multi-criteria analysis and prioritization of investments

Category	Criteria
Economic Criteria	1. Enhance the Provision of Social Services, Infrastructure or Utilities
	2. Development of an Economy Based on Multiple Sources of Revenue
	3. Development of Domestic Food Production for Food Security
Social Criteria	4. Access to Quality Education and Training
	5. Improve Health and Wellbeing
	6. Empower and Develop the Workforce
Environmental Criteria	7. Improve Resilience to Climate Change and Natural Disasters
	8. Rehabilitate and Restore Degraded Lands
	9. Deliver a Positive Impact on the Environment
Performance Criteria	10. Linkage with Other Infrastructure
	11. Reduce Whole-of-Life Costs
	12. Improve Overall Financial Position

Source: Authors (Table 8).

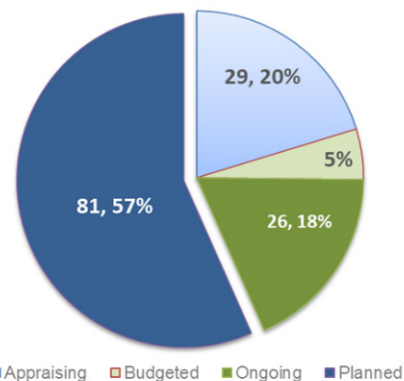
The process for unearthing the long list of capital development projects to be included in the NIISP involved:

- a review of the long list from the 2019 NIISP and current lists maintained by PAD and DOF,
- extensive consultation with over 25 government departments and others to identify additional planned projects, and
- an independent review of current asset condition, to identify priorities for rehabilitation or strengthening of existing assets.

Following these steps, 145 projects were identified, including ongoing, budgeted, appraising and planned/pipeline opportunities (Table E4).

Table E4: Summary of projects by Type and Status

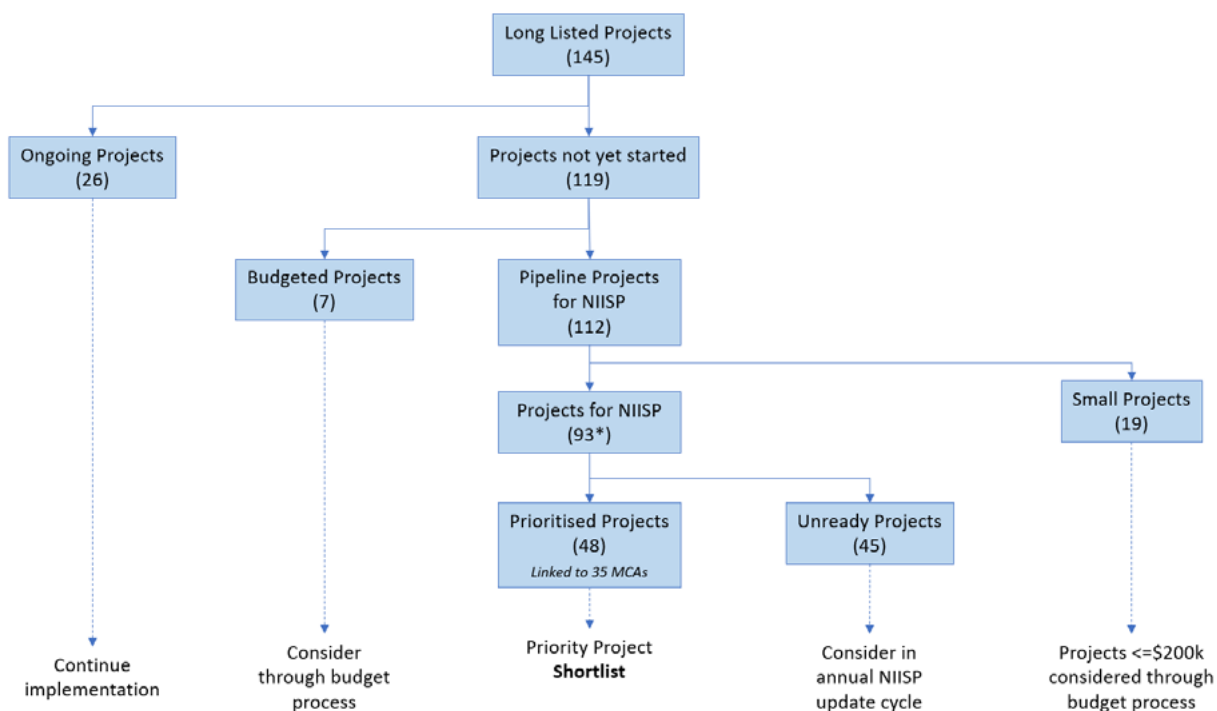
Type	Ongoing	Budgeted	Appraising	Planned	Total
New	14	3	16	35	68
Upgrade	5	1	4	21	31
Renewal	4	2	2	14	22
Maintenance			2	4	6
Purchase			2	5	7
Tech. Assist.	3	1	3	5	12
Grand Total	26	7	29	84	145



Source: NIISP Project database (Table 11).

The 145 projects on the long list were assessed to determine their state of readiness, financial size and current position within the budgeting process. This identified that of the 145 projects, 33 were already either ongoing, or have been incorporated into the government budget process. Of the rest, 19 are estimated to be below the minimum financial threshold (\$200k) for the NIISP. 45 projects have been assessed as not being sufficiently well developed to be properly prioritized at this stage, leaving 48 projects to be incorporated into the short list and subjected to the MCA process and prioritization.

Figure E1: Results of Early-Stage Screening



Source: NIISP Screening Results (see Figure 6).

List of Priority Projects from 2023 Review of Pipeline *(extract from Table 14)*

1. Major Projects

(high cost - high impact)

- Micronesian Games 2026 Infrastructures Program (MGIP)
- MGIP: Grandstand Stadium with Indoor Sport Hall
- MGIP: Games Village
- New Multipurpose Building for Life Skills
- Redevelopment of RON Hospital
- Nauru Airport Terminal Redevelopment Program
- Redevelopment of Naoero Public Health Centre

2. Quick Win Projects

(lower cost - high impact)

- MGIP: Mini Sports Halls
- MGIP: High Performance Center
- MGIP: Land Site Preparation and Access Road
- MGIP: Renovation of Existing Sport Courts
- Hospitality Kitchen Improvements
- Engineering Industrial Workshop Improvements
- Buada Low Voltage Underground Cable Upgrade
- Upgrade 3.3kva Switch Gear at Power Station
- Upgrade RMN, RME, and RMS Power Transformers
- Upgrade Substation at Location Area
- Maritime Police Unit
- New Seawall Behind the Central Police Station
- Sporting Equipment and Accessories
- SRRP: Rehab. of NPC Road and Access Roads

3. Fill In Projects

(lower cost - moderate impact)

- New Renal Dialysis Unit Building
- CPP: Renewal of Seawalls (Aiwo Hotel)
- CPP: Renewal of Seawalls (north of new port - 82m)
- CPP: Renewal of Seawalls (north from new port - 386m)
- CPP: Renewal of Seawalls (Menen Hotel - 414ms)
- CPP: Construction of Seawalls (Anetan locations)
- CPP: Construction of Seawalls (Anibare locations)
- CPP: Repairs to Existing Seawalls (riprap)
- Replacement of Fire Trucks
- Water Storage Tank Upgrade
- SRRP: Rehabilitation of Boe School Access Road
- SRRP: Improving Drainage on Ring Road
- SRRP: Capital Repairs to Roadside Curbs and Drainage
- Master Plan to Consolidate Government Buildings
- RPC 2 Grid Extension
- Upgrading the Police Training College
- Barrier Railing – Airport Ring Road
- Extension of Meneng Farm
- Refurbishment of Aquaculture Holding Centre
- Acquire New 16m Cherry Picker
- Heavy Lifting Solution - Crane
- Recon. of Internal Affairs Buildings at Mennen Hill)

4. Challenging Projects

(high cost – moderate/targeted impact)

- NSUDP: Water Supply Pipeline
- NSUDP: Sanitation Upgrade

1. Introduction

1.1. Infrastructure in Nauru

The Government of Nauru is charged with the good stewardship and management of a range of infrastructure assets, such as roads, airports and seaports, buildings, and plant and equipment. Public infrastructure assets exist to provide a service to users and the community. For example, ports allow goods to be imported and exported, roads allow those goods to get to market and power transmission lines allow those markets to operate. When infrastructure fails, these services are interrupted. Reliable infrastructure is one of the foundation stones of sustainable development in the Pacific.

The Government of Nauru is facing mounting financial challenges in sustaining public services at desired levels due to the ageing and degrading infrastructure, increasing demand and expectations for public services, adverse impacts of climate change, and inadequate funding for asset replacement, renewal, and maintenance.

Most of the country's developments and assets are in low-lying areas along the coastline, exposing them to damage from shoreline change and wave-driven inundation. Nauru has very limited access to freshwater and is almost entirely dependent on rainwater collection tanks and a desalination plant. 93% of Nauru's Population live within 1 km of the coast, with all the population living within 5 km. Furthermore, Nauru's land has been heavily mined for phosphates over the past century leaving approximately 80% of its 21km² area barren and unsuitable for agriculture, forestry, or habitation, without costly rehabilitation.

These challenges are placing pressure on the government to improve the effectiveness of its existing infrastructure asset management practices and carefully plan new infrastructure development projects to ensure their whole-of-life costs are considered.

Infrastructure assets are subject to a corrosive coastal environment, which, in the absence of ongoing preventative maintenance, results in significant reduction in lifespan of these assets.



1.2. Role of the Integrated Infrastructure Strategic Plan

The first Nauru Economic Infrastructure Strategy and Investment Plan (NEISIP) was published in November 2011. The NEISIP was closely linked to achieving the economic and social strategies of the updated 2009 National Sustainable Development Strategy (NSDS). The second integrated Nauru Integrated Infrastructure Strategic Plan (NIISP) was adopted by Cabinet in November 2019 and coincided with the release of the NSDS 2019-2030.

This third iteration of the NIISP builds on previous work by:

- Assessing lessons learned from a mid-term review and proposing capacity development initiatives;
- Updating the asset register and condition of assets – ultimately identifying a corrective maintenance program and refurbishment projects for inclusion;
- Assembling a more comprehensive pipeline of planned projects through a more rigorous engagement process with infrastructure agencies;
- Aligning prioritization criteria with the 2019 NSDS and increasing government participation in the multi-criteria analysis process; and
- More tightly integrating the NIISP into Nauru’s planning and budgeting processes, namely an early-stage screening gateway for infrastructure projects.

We thank all those involved in the formulation of the NIISP 2023.

1.3. Capital infrastructure projects for inclusion

The typically long service lives of infrastructure assets, high capital outlay, and ongoing maintenance burden necessitates more thorough asset management practices and a longer-term view of capital expenditure for these assets. Founded largely on the 2019 definitions, the following classes of investment (Table 1) are included in the NIISP project pipeline.

Table 1: Infrastructure Investment Project Categorization

Project Type	Definition
New (Type N)	New infrastructure, which is greenfield in nature, new public infrastructure, mostly large and development-partner driven.
Rehabilitation or Refurbishment (Type R)	Infrastructure rehabilitation, which aims to rehabilitate buildings and civil works infrastructure such as roads, runway, and sea protection walls to original design and functionality.
Upgrade or Improvement (Type U)	Infrastructure upgrading, which aims to improve similar types of civil infrastructure beyond its original design to adapt to evolving standards and include additional functionalities to avoid technical obsolescence.
Equipment Purchase (Type E)	Major plant of specialist equipment purchases such as fire trucks, hospital scanning equipment, heavy earth moving equipment and the likes.
Technical Assistance (Type T)	Consultant studies and designs associated with infrastructure or capital works (e.g. feasibility study, monitoring) or capacity building and workforce training initiatives.

















Source: 2019 NISP categories plus new category for consulting and technical assistance.

A capital investment threshold of \$100,000 has been set for projects or programs to be screened and prioritized in the NIISP (smaller value investments would be screened and approved through the normal budget cycle).

1.4. Sectors included

The Technical Assistance (TA) team on consultation with the lead agency for the Government of Nauru, the Department of Infrastructure Development (DoID), completed a review and rationalization of the sectors presented in the 2019 NIISP and landed on the following sector and subsector classifications for the 2023 project list compilation (Table 2).

Table 2: Investment Planning Sectors and Subsectors

Sector	Subsector	Example of physical infrastructure assets
Transport	 Land	Roads, bridges, culverts, signs, lighting
	 Air	Runways, apron, terminals, nav aids, vehicles
	 Maritime	Wharfs, jetties, cranes, vessels, lighting
Utilities	 Water and Sanitation	Treatment plants, sewer lines, pumping
	 Energy	Generator, solar panels, lines, natural gas
	 Telecom and ICT	Telecom towers, networks, fiber landing
	 Solid Waste and Reclamation	Collection trucks, heavy equipment
Community	 Education	School buildings, administration blocks
	 Healthcare and Disability	Hospitals, specialist equip., medical centers
	 Community and Cultural	Museums, libraries, cultural center
	 Sports and Recreation	Sports grounds, stadium, track
Security and Commerce	 Police, Justice, and Border	Prisons, admin buildings, barracks
	 Emergency Services	Ambulance, fire trucks, stations, ES centers
	 Public Administration	Government buildings
	 Coastal and Environment	Seawalls, land reclamation, protection works
	 Commerce and Industry	Processing plant, markets

Source: 2019 NISP with amendments.

2. Strategic Planning Context

2.1. Regulatory Guidance

Relevant legislation

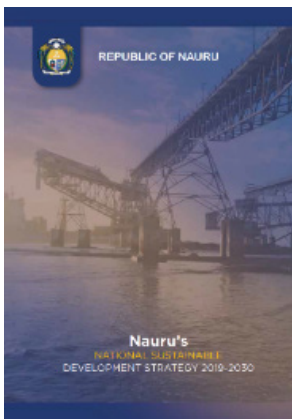
In Nauru, Public Financial Management is centralized in the Ministry of Finance in line with the provisions of the **Public Finance (Control and Management) Act 1997**. This is the principal act that stipulates preparation of annual appropriation bills for each budget year. The finance minister introduces an annual appropriation bill for the upcoming fiscal year. All appropriations lapse at the end of the year, meaning the budget is for a single fiscal year. The approach is to set a conservative initial budget estimate, meeting the requirements of the fiscal strategy, and then to use additional revenues as they materialize to fund additional priorities. There is a similar degree of scrutiny over the supplementary budgets as for the original budget.

The **Development Fund Act 2011**, establishes and stipulates the operation and reporting on the Development Fund in facilitating the funding of development projects.

The **Treasury Fund Protection Act 2004** provides protection against the withdrawal of monies from the Treasury Fund without Parliamentary approval. It provides penalties in the event the Cabinet gives directions that are contrary to the Constitution and against public officers who undermine the Constitution. It also stipulates that government guarantees must be approved by Parliament.

Strategic guidance

The NIISP 2023 is intended to establish government priorities for infrastructure development that best align with the National Sustainable Development Strategy (NSDS) 2019-2030 priority areas and NSDS Goals. The seven long-term national development goals identified in the NSDS are:



1. Stable, trustworthy, fiscally responsible government;
2. Access to quality education, formal and non-formal;
3. Improved health and well-being;
4. Provision of enhanced social, infrastructure, and utilities services;
5. Development of an economy based on multiple sources of revenue;
6. Enhance resilience against the impacts of climate change that is inclusive of rehabilitating and restoring degraded lands; and
7. Development of domestic food production for food security.

Specific infrastructure sector priorities are also identified in the NSDS, and include:

- Improving the port, the airfield, roads, schools, and other buildings that are in a fragile condition;
- Upgrading infrastructure to increase efficiency and add renewable energy into the electricity supply;
- Implementing sustainable water management policies; and
- Improving solid waste management and options to properly dispose of liquid, chemical, and hazardous wastes.

Aligning priority projects with the NSDS objectives through a multi-criteria analysis (MCA) and screening process was foundational to the 2019 NIISP and its merits were extolled during the PEFA Review in 2022. More on the updated MCA approach for the 2023 NIISP have been presented in **Section 4.3**.

2.2. Climate change and resilience

Susceptibility to natural hazards

Several studies have been completed with the aim of setting out a vulnerability profile for Nauru. The results of these studies are combined and summarized in Table 3. Based upon the hazards identified, more detailed studies have been undertaken, particularly to identify the likely implications of the vulnerabilities identified.

The main hazards faced by Nauru are sea-level rise and coastal flooding, and the impact of heavy rainfall. Under present sea-level conditions, a 5-year annual recurrence interval inundation event floods 6.2% of Nauru’s buildings and 2.7 km of roads. Results indicate that sea-level rise will clearly exacerbate the risk of coastal flooding, with 16.7% of buildings and 8.1 km of roads inundated by a 5-year annual recurrence interval event by 2100 (under the SSP5-8.5 scenario).¹ While this represents a pessimistic scenario, this does highlight the potential scale of the issue.

Table 3: Nauru’s exposure to natural hazards and events

Hazard	Future Likelihood	Comments
Landslides	Very low ¹	
Pluvial Flooding	Very high	Mean rainfall is projected to increase, an increase in average annual precipitation in the order of 20%–40% is likely by the 2090s, along with more extreme rain events. The risk of flash flooding of this nature is expected to increase in future due both to rising temperatures and increasing average annual precipitation totals. ²
Extreme Temperature	Moderate	Annual mean temperatures and extremely high daily temperatures will continue to rise between 2 and 3 degrees by 2090 ³ .
Wildfire	Very Low ⁴	
Sea Level Rise/ Coastal Flooding	Very High ⁵	Sea level rise will continue – up to 89cm by 2090. In Nauru, the average rate of rise has been around 5 millimeters per year (mm/yr) since 1993, higher than the global average of around 3.2 mm/yr. Nauru is protected by a ring of coral reef, and its elevation varies from 5 to 70 meters above sea-level. As such Nauru is not the most at-risk nation of the Pacific Islands. Nonetheless, issues such as saltwater intrusion represent a significant risk and impacts which require monitoring include the intersection of sea-level rise with other climate change influences on coral health.
Drought	Moderate	La Niña events are associated with a delayed onset of the wet season and drier than normal conditions, often resulting in an extended drought. Drought is the main driver of disaster risk in Nauru, contributing to water scarcity and contamination events. Likely to reduce as rainfall levels increase.
Tsunami	Low	No historical evidence of damage caused by tsunamis.
Storms/ Cyclones	Moderate	Nauru does not experience tropical cyclones but does suffer from major storms.
Earthquake	Very low	No historical evidence of earthquakes.

Sources: Pacific Risk Profile, Nauru, Australian Aid, 2021; Climate Risk Country Profile: Nauru (2021): The World Bank Group; Nauru Coastal Risk Assessment, 2017.

The natural hazards that Nauru faces are not as widespread as many other pacific countries, being largely confined to the effects of climate change in coastal areas. This analysis shows that these impacts are largest on the northern and southern coastlines of the island. Whilst these are not the most heavily populated, they do contain important infrastructure, such as the airport, main road and public buildings.

The Government of Nauru has embarked on the *Higher Ground Initiative*, which aims to strengthen the

¹ Nauru Coastal Risk Assessment, Pacific Community, 2023

resilience of Nauru by relocating population and key services to the topside. This also links to other objectives, such as rehabilitating land for use in agriculture, piloting a new form of urban development and finding land for the development of renewal energy.

Nationally Determined Contribution to Climate Change

Nauru was one of the first countries to submit adopted Nationally Determined Contributions (NDCs) in 2015 and has subsequently resubmitted a revised document, giving more detail on key actions. Infrastructure-specific initiatives related to the NDC 2021–2030 are presented below. These initiatives have been included in the project pipeline (**Section 5.1**).

Theme 1. Productive Land & Coast

- Develop master land use plan for relocation of homes and critical infrastructure to Topside as part of Higher Ground Initiative
- Construction of residential units on Topside (pilot Smart Village)
- TA for coastal erosion and develop plan for implementing hard and nature-based solutions
- Complete construction of new climate change resilient port facility

Theme 2. Healthy & Productive People

- Collect, transport, and dispose of all asbestos waste at a secure site off island

Theme 3. Water Security

- Establish NUC water office and laboratory to monitor the quality of water supply
- Undertake repairs to NUC water storage tanks
- Increase NUC water storage capacity
- Implement water supply components of the Water and Sanitation Master Plan
- Modelling of impacts of sea level rise and saltwater intrusion into groundwater

Theme 5. Energy Security

- Establish power grid capable of providing stable and affordable power

Theme 6. Healthy Environment

- Improve dumpsite cells to prevent contamination of ground water supplies and run off
- Build new resource recovery facility for inorganic waste
- Build new organic waste recovery and composting facility
- Develop Land Use & Restoration Plan and begin implementation
- Pilot soil restoration methods and Sustainable Land Management techniques

Theme 8. Loss and Damage

- Conduct a long-term risk assessment to understand the scale, timing, and costs of climate change impacts on important national assets

Note that “4. Food Security” and “7. Good Governance” do not include any infrastructure related project initiatives or TA’s in the updated NDC, and an eighth area of contributions – Loss & Damage – was included to address climate change impacts that exceed Nauru’s adaptive capacity.

2.3. Custodians of Infrastructure

Cabinet Ministers

The Republic of Nauru Cabinet, as elected members, are responsible for ensuring public needs are well served by the infrastructure assets in the most cost-efficient manner. Therefore, Cabinet members are key stakeholders, who want to oversee the successful development and

implementation of the NIISP. The main role of Cabinet in this process is to review and approve the priority infrastructure investment projects and ensure appropriate level of resources are available to finance and deliver the projects.

Secretaries and CEOs

The secretaries for each ministry or department and the chief executive officers of public sector enterprises have the primary responsibility for ensuring that the departments and corporations under them are effectively managed to provide public services that meet public satisfaction and in most cost-efficient way. The roles of secretaries and CEOs are to collectively advise the Cabinet of where investments are required and present robust justification for these investments. They are also responsible for allocating adequate resources and funding, monitoring performance, and take corrective actions when required.

Table 4 provides a summary of the primary infrastructure agencies who have been engaged and consulted with during this iteration of the NIISP. A more complete engagement list is presented in **Appendix A**.

Table 4: Participating Ministries and Agencies Consulted

Ministry or Agency		
Project Leadership		
	Department of Infrastructure Development	DOID
	Department of Finance - Treasury Division	DOF
	Department of Finance - Planning and Aid Division	PAD
Primary Infrastructure Agencies		
1	Department of Infrastructure Development	DOID
2	Department of Transport	DOT
3	Nauru Maritime and Ports Authority	NMPA
4	Department of Health and Medical Services	DOH
5	Ministry of Public Service (Public Admin and Operations)	PSA
6	Department of Education and Training	DOET
7	Nauru Vocational Training Centre (DOET)	TVET
8	Nauru Utilities Corporation	NUC
9	Department of Media	DOM
10	Nauru Police Force	NPF
11	Department of Sport	DOS
12	Department of Climate Change and National Resilience	DCCNR
13	Nauru Emergency Services	NES
14	Nauru Rehabilitation Corporation	NRC
15	Department of Environment Management and Agriculture	DEMA

Table 4: Participating Ministries and Agencies Consulted (continued)

Ministry or Agency		
Secondary Agencies		
16	Nauru Fisheries and Marine Resources Authority	NFMRA
17	Department of Land and Survey Management	DLS
18	Department for People Living with Disability	DPLD
19	Department of Justice and Border Control	DOJ
20	Department of ICT (and Nauru Fiber Cable)	ICT
21	Department of Commerce, Industry and Environment	DEMA
22	Vital Energy Incorporated	VEI
23	CENPAC (Telecom Provider)	CENPAC
24	Department of Civil Aviation (DOT)	DCA
25	Department of Women and Social Development Affairs	WSDA

Source: Discussions with project leadership team and steering committee.

International Development Partners

Many international development partner organizations financially support public sector infrastructure investments in Nauru. They are interested in ensuring that public benefits from aid are maximized and sustained through prudent asset management practices. The contributions these partners make to support and maintain infrastructure is discussed further in **Section 6**.



3. State of Infrastructure

3.1. Asset Register

The asset register contains pertinent information required for making asset management decisions and to provide financial controls for the following categories of assets:

- buildings;
- roads, including sealed and unsealed roads, as well as roadside footpaths;
- airstrip and navigation aids;
- coastal protection assets;
- wharfs and boat ramps;
- telecommunication plant; and
- solid waste management assets.

The infrastructure asset register was initially created in 2019 and has been updated to match the current state of the public sector infrastructure assets in Nauru, in 2023, by incorporating the following changes:

- a) addition of the infrastructure assets, constructed since the initial development of the asset register in 2019;
- b) removal of the infrastructure assets, that have been retired from service, during the last four years;
- c) Update of financial information for all infrastructure assets, recorded in the asset register, including accumulated depreciation, current book value, gross replacement cost and annual maintenance cost allowance for each asset; and
- d) Update of the physical and functional performance ratings of all infrastructure assets and calculation of asset condition index.

Full details of the asset register updates are provided in **Appendix B and C**.

Table 5 summarizes the following financial information for the infrastructure assets, employed in Nauru, at the end of 2023:

- Initial Book Value – the original procurement and installation cost of the assets, during the year an asset was purchased;
- Accumulated Depreciation – the depreciation allowance for the number of years an asset has been in service, based on straight-line depreciation method;
- Net Book Value - calculated by subtracting the depreciation allowance from the initial book value.
- Gross Replacement Cost - estimated replacement cost of assets during the current year, using like for like specifications; and
- Annual Maintenance Funding allowance – annual funds required for preventative maintenance to prevent asset impairment due to accelerated aging.

Table 5: Nauru Asset Register Summary

Assets	Initial Book Value ^a	Accum. Depreciation ^b	Net Book Value ^c	Gross Replacement Costs ^d	Annual Maintenance Allowance ^e
Buildings:					
Education Buildings	\$24,490,020	\$8,395,497	\$16,094,523	\$53,417,379	\$267,087
Justrice and Border Control Bldgs	\$8,336,179	\$1,356,705	\$6,979,474	\$14,855,446	\$74,277
Public Service Admin Bldgs	\$15,936,473	\$3,903,950	\$12,032,523	\$37,815,306	\$189,077
Multi Culture Affairs Bldgs	\$871,779	-	\$871,779	\$1,002,546	\$5,013
Nauru Media Bldg	\$1,308,620	-	\$1,308,620	\$1,389,912	\$6,950
Police service Buidng	\$2,514,591	\$651,931	\$1,862,660	\$4,635,057	\$23,175
Emergency Services	\$233,743	\$199,078	\$34,665	\$1,481,203	\$7,406
Dept of Infrastructure building	\$518,096	\$22,688	\$495,408	\$685,182	\$3,426
ICT Buildings	\$249,476	\$130,044	\$119,432	\$1,259,526	\$6,298
Health Buildings	\$7,515,854	\$3,181,893	\$4,333,961	\$16,139,984	\$80,700
Fisheries and Marine Resources Buildings	\$2,065,814	\$624,325	\$1,441,489	\$4,221,512	\$21,108
Civil Aviation Buildings+	\$3,740,979	\$2,507,884	\$1,233,095	\$15,729,098	\$78,645
Port Authority Buildings	-	-	-	-	-
CIE Buildings	\$63,317	\$39,705	\$23,612	\$153,158	\$766
Total Buildings	\$67,844,941	\$21,013,700	\$46,831,240	\$152,785,310	\$763,927
Coastal Protection:					
Total Seawalls & ripraps	\$15,291,617	\$4,086,588	\$11,205,029	\$40,564,000	\$717,000
Land Transport:					
Sealed Roads	\$7,439,739	\$5,739,358	\$1,700,382	\$41,110,000	\$148,000
Footpaths	\$490,807	\$490,807	-	\$4,652,000	\$47,000
Total Land Transport	\$7,930,546	\$6,230,165	\$1,700,382	\$45,762,000	\$195,000
Civil Aviation Assets:					
Runway, Taxiways and Hard stop Areas	\$9,502,331	\$6,385,286	\$3,117,045	\$51,561,000	\$128,000
Other navigation assets	\$1,715,420	\$364,751	\$1,350,669	\$2,978,000	\$60,000
Total Civil Aviation Assets	\$11,217,751	\$6,750,038	\$4,467,713	\$54,539,000	\$188,000
Port Authority Assets:					
Port Authority Assets:	(under construction)				
NRC Assets:					
Unsealed Roads	\$1,856,602	\$1,168,455	\$688,147	\$8,801,000	\$440,000
ICT Assets:					
Antenna Towers & IT equipment	\$483,587	\$274,289	\$209,299	\$958,000	\$19,000
NUC Assets:					
Fuel Storage Farm Assets (approx)	\$19,000,000	\$4,200,000	\$14,800,000	\$40,000,000	\$800,000
Electricity Sector Assets (approx)	\$60,000,000	\$29,500,000	\$30,500,000	\$80,000,000	\$1,600,000
Water Sector Assets (approx)	\$6,000,000	\$4,100,000	\$1,900,000	\$8,000,000	\$160,000
Total GON Infrastructure Assets	\$189,141,457	\$77,048,947	\$112,092,510	\$430,451,310	\$4,864,621

Notes:

- a) Initial Book Value = the original procurement and installation cost of the assets during the year an asset was purchased.
- b) Accumulated Depreciation = the depreciation allowance for the number of years an asset has been in service, based on straight-line depreciation method.
- c) Net Book Value = calculated by subtracting the depreciation allowance from the initial book value.
- d) Gross Replacement Cost = estimated replacement cost of assets during the current year, using like for like specifications.
- e) Annual Maintenance Funding allowance = annual funds required for preventative maintenance to prevent asset impairment due to accelerated aging.

Source: Summary from asset register, condition assessment and unit cost data presented in Appendix B and C.

3.2. Condition Assessment Methodology

All infrastructure assets, upon being placed in service, experience gradual degradation in their operating performance due to various reasons, including:

- a) gradual wear and tear, corrosion or erosion, deformation or other physical or chemical changes in assets' components;
- b) damaged or defective asset component or component parts;
- c) increase in frictional forces due to drying out of lubricants, elevated operating temperature due to low levels of coolants or increase in vibrations for mechanical assets; and
- d) lack of preventative maintenance resulting in premature asset impairment.

Typical Useful Life (TUL) of an asset or asset component is the time-period in years, during which the asset or asset component is expected to provide acceptable functional performance, under typical environmental conditions and the recommended maintenance regime. An asset is deemed to have reached its end-of-life when its operating performance falls below the lowest acceptable service level. The actual service life provided by an asset can deviate significantly from TUL, depending on the environment in which it operates and the maintenance it receives. An asset can also suffer premature impairment due to an accident or during a natural disaster. As a result, some assets fail prematurely, long before they reach their TUL, while others continue to provide reliable service for many years beyond their TUL.

Therefore, rather than estimating an assets' remaining useful life based on in TUL and the number of years it has been in service, modern asset management practices require that decisions related to an asset's end-of-life and the timing of investments into asset's renewal or replacement be based on asset's operating condition, rather than its service age. Accordingly, the PRIF methodology for infrastructure condition assessment employs Asset Condition Index (ACI) to express the operating condition of infrastructure assets on a numeric scale of 1 to 100. When ACI for an asset reaches an unacceptable level, the asset is deemed to have reached its end-of-life and must be retired from service and replaced.

Most infrastructure assets are composed of multiple components, the physical condition of which impacts the overall operating condition of the asset. Condition assessment is, therefore, performed at the component level. Each major component is assigned a physical condition rating based on its current operating state. The component *condition states* range from 1 to 5, where 5 represents "Excellent" condition and 1 represents "Very Poor" condition.

The functional performance rating of an asset is assessed by evaluating the output produced by the asset, against pre-established acceptable performance benchmarks, in form of service levels. The service levels are typically set in form of an acceptable range and they include the relevant performance indicators to express:

- a) quality and quantity of service provided by the asset;
- b) reliability of service provided by the asset, i.e. frequency and duration of interruptions
- c) the safety impacts of asset operation; and
- d) the operating efficiency of asset, determined through monitoring maintenance and emergency repair costs; etc.

The functional performance rating is also expressed in one of five distinct *performance states*, also ranging from 1 to 5.

After physical and functional performance ratings for an asset are established, the Asset Condition Index is calculated by using one of the relevant algorithms provided in the **PRIF Infrastructure Condition Assessment Methodology**.

3.3. Outcomes from Condition Assessment

The condition assessment results of infrastructure assets in Nauru are detailed in **Appendix C**, Asset condition assessment results are briefly summarized below.

Education sector buildings

The education sector currently has 43 buildings housing various institutions. Two of these buildings, both located at Yaren Primary School, have degraded beyond repair. In addition, several other buildings are also in need of major capital repairs as listed below:

- one building at Meneg Infant School and one building at Sacred Heart College require structural repairs;
- 10 school buildings need roof replacement;
- three buildings require new siding;
- three buildings require ceiling and interior wall repairs because of damage caused by roof leaks;
- seven buildings require new floors and subfloors; and
- nine buildings require repairs to toilets, plumbing and electrical services.

Health sector buildings

The health sector employs multiple buildings, including the hospital, the public services office, public health centers, and dental clinics.

- The masonry structure buildings at the hospital were constructed before 1995 and have been extensively renovated over the past 10 years. The structures and floor slabs in these buildings are in good condition, but the roofs, ceilings, electrical wiring, and plumbing are in poor condition. Due to poor quality of the renovation work and lack of maintenance, roofs for most of the buildings have been leaking for many years, and continuous ingress of rainwater into the building interior has caused extensive damage to ceilings and resulted in mildew growth. In some cases, the sanitary drains are not correctly graded and do not function properly. Water has also been getting into electrical wiring and switches and poses a safety hazard to occupants.
- Newly constructed hospital buildings, which employ modular, prefabricated, steel structures, supported on raised concrete pillars, were constructed over a period of about four years from 2014 to 2018. These buildings are not correctly designed and constructed for the hot, humid, and corrosive climate of Nauru and are suffering from accelerated aging. Particle board subfloors are rapidly decaying due to moisture absorption, resulting in loss of structural strength. The flat roofs are leaking in multiple locations and water ingress into the interior has caused impairment of electrical wiring and ceilings. Although the buildings have been in service for less than 10 years, they are expected to reach the end of their useful life in the next 5 to 10 years.
- Nauru Public Health services were previously located in two adjacent buildings, one of which was destroyed in a fire and has been demolished. The second building is in very poor condition and is at the end of its life. A larger upgraded building is required to replace these public health services buildings.
- Three small portable trailer buildings house a community wellness center and two dental clinics, and these three buildings are in fair condition.

Administration buildings

This group includes a total of 23 buildings, including the main administration office, the parliament, the conference center, the sports complex, the courts and jail buildings, the police services building, and the fire hall.

- The main administration building is currently in fair condition, but repairs and renovations are required in several locations to the exterior wall cladding, windows and roof, air conditioning, plumbing fixtures, and roof gutters. Over the past 10 years, several extensions have been added to this building without proper planning, stretching the sewage disposal and electrical service to the limit. The building is located in a low-lying area and is exposed to the risk of flooding during a sea storm. There is a need to develop a master plan identifying the future space needs for the administration building, an assessment of the rising sea level interrupting critical government operations during a sea storm and determining if some or all of the critical government administration functions should be moved to a new building, constructed on the higher ground.
- There are five Ministry of Home Affairs buildings, housing child protection counselling, a domestic violence shelter, youth affairs services, the Nauru cultural center, and the Nauru Tourism office, that are poorly designed and constructed, without a properly sealed external envelope, allowing rainwater to get into the building interior. Water Ingress into the building interior over the past several years has resulted in structural timber decay and weakening, damaged gyprock ceilings, walls and floors, mildew growth and defective and unsafe electrical wiring. These buildings are not fit for use and need to be demolished and rebuilt.
- The roof of the police services building has been leaking for some time and there are visible signs of damage to the building interior. The building roof needs immediate replacement. The septic system drains at the fire hall building also requires an upgrade. The recently constructed building adjacent to the ICT building shares a common septic tank with the ICT building, which is undersized to cater to both buildings and needs to be upgraded.

Other public sector buildings

The condition assessment results of the remaining public sector buildings are summarized below:

- There are a total of four buildings serving the Civil Aviation sector and these include the airport, the VIP lounge adjacent to the airport and two small nav-aid equipment buildings on the high ground. One of the nav-aid equipment buildings requires a new roof and ceiling repair and the airport stand-by generator also needs replacement. The rest of the buildings are in good condition.
- Port Authority buildings are currently under construction.
- Fisheries and Marine Resources owns six buildings, all of which have been refurbished and upgraded and are in good condition.
- The Ministry of Multicultural Affairs has recently constructed four new buildings on high ground and these are all in good condition.
- Nauru Media Center has recently moved its operations into a newly constructed building and the old building, which was in poor condition, has been demolished.
- The Department of Infrastructure Development office is located in a recently constructed building and it is in good condition.

Sealed roads

The sealed roads in Nauru include the ring road, Boada district access road, Boada lagoon road, two access roads to the High Commission Hill, the road on High Commission hill, the airport access by-pass road, Nauru primary school hill access road, and Boe school access road.

- With the exception of some minor defects in a few sections, the ring road pavement is generally in fair condition. Clogged soak pits are the major deficiency in the ring road, which cause frequent ponding on many sections of the road during rainy season. Ponding not only impacts the safe functional performance of the road, but also leads to accelerating aging of the road pavement. Solutions to this problem include ongoing routine maintenance to clear the soak pits from falling debris and leaves, increasing the size of soak pits where the existing size is inadequate and adding additional soak pits where the soak pits soil beds are of insufficient land area or where the soak pits are not located at the lowest grade on the road. A capital project to remove this deficiency on the ring road is high priority.
- The two access roads to the Australian High Commission as well as the road on the hill are in very poor condition. As shown in Figure 1, some sections of these roads have been partially repaired during the past 5 years, but the repair work is not continuous; some road sections have been repaired, leaving the adjacent sections, which were in equally poor condition, untouched. The quality of repair work is very poor and is not expected to last beyond 2–3 years. The Boe school access road and the airport bypass road also need resealing.
- The roadside concrete curb is generally in “fair condition”, but it has experienced damage in some locations. Approximately 5% of the curb requires capital repairs.

Footpaths

Most sealed roads in Nauru have a footpath, adjacent to the curb. In most locations, the footpath is provided on one side of the road, but in more densely populated districts, such as Baitsi, Uaboe and Nibok, a footpath is provided on both sides of the road; in sparsely populated districts, such as Ijuw and Anibare, there are sections with no footpath. The footpaths are generally in “fair condition” but have experienced damage in some locations. Approximately 5% of the footpaths require capital repairs.

Unsealed roads

All unsealed roads in Nauru are located on the high ground. These were initially developed as temporary access roads to facilitate phosphate mining operations. Over the recent years, several permanent facilities have been established on the high ground, requiring access by non-mining motor vehicles, including the Regional Processing Centers, the landfill facility, and the jail. There are currently approximately 9 km of unsealed roads which require access. Maintaining these roads in good working condition is very costly and it would be more economical to seal these roads. However, we understand there may be still phosphate mining potential under the unsealed roads and therefore these cannot be sealed at this stage.

The condition of the roads is highly dependent on the regrading frequency. During the month of October 2023 all unsealed roads were in good condition.

Figure 1: NPC Road in Very Poor Condition



NPC Road condition where no repair work has been done.



Some road sections have been repaired while adjacent sections have been left as is.



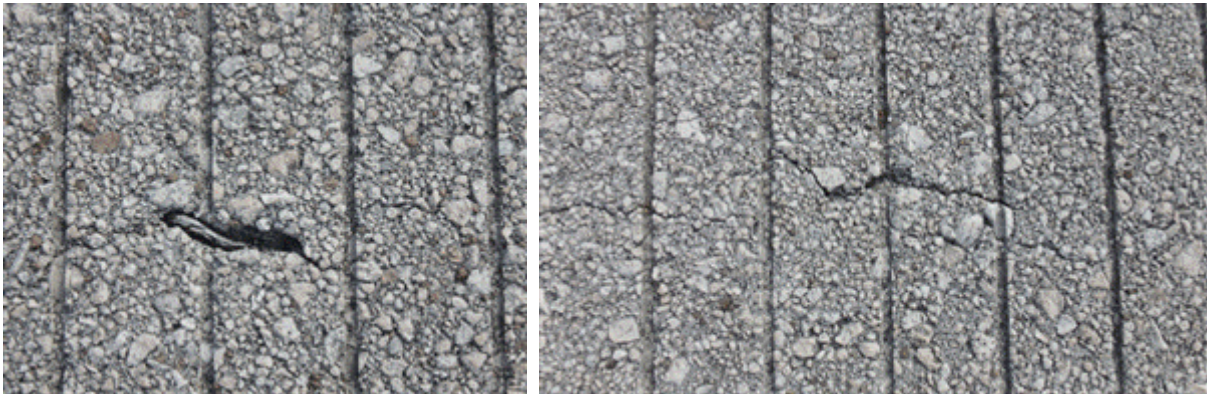
The completed repair work is generally of very poor quality.

Civil aviation infrastructure

Nauru airport runway, taxiways and hard-stop area were last sealed in 1992 and have now provided a service life of over 30 years. The typical service life of a superior quality surface pavement for a runway is 25 years. The pavement was inspected by subject matter experts from Fulton Hogan of New Zealand in 2016 and based on the condition of the surface pavement they had recommended the surface pavement should be resealed. While the base layer appears to be in good condition, a close-up inspection of the runway shows visible signs of cracking in the surface layer, as shown in Figure 2.

The surface seal on all parts of the aircraft movement area, including the runway, taxiways and hard stop areas is assessed to be in poor condition.

Figure 2: Cracks in Runway Surface Layer



Source: Inspection photos by PRIF Asset Management Specialist.

The navigation equipment and the security fence at the airport are currently in Fair condition.

Coastal protection infrastructure

The coastal protection structures in Nauru include a steel reinforced concrete sea wall at the edge of the runway, three sections of grouted rock sea walls and several rock revetments along the coast. A detailed condition assessment of the coastal protection infrastructure was undertaken by an Australian professional firm - JBP Scientists and Engineers, in 2023 and the results of the assessment are available in the report titled “Nauru Seawall and Road Drainage Condition Assessment”. The report provides a detailed evaluation of the current condition and effectiveness of all the existing seawalls, including the ones that have been constructed recently during the past five years. The report also identifies coastal areas where new seawalls are required due to the risk to adjacent infrastructure from coastal erosion. An important observation presented in the report is that the recently constructed rock revetments have inadequate slope with a very narrow base and therefore their expected service life has been reduced in the asset register.

The following existing seawalls have been determined to be in poor condition, requiring investments into their rehabilitation:

- SWCP 409, at chainage 3060 at the rear of Aiwo Hotel;
- SWCP 411, at chainage 4670, short seawall, immediately north of the new port;
- SWCP 412, at chainage 4770, long seawall, spanning north from the new port; and
- SWCP 423, at chainage 4810, the seawall behind the Menen Hotel

The report also identifies the following three vulnerable locations, with evidence of coastal erosion posing risk to ring road, requiring construction of new sea walls:

- erosion hotspot at chainage 9,650 m, in the Anetan district, which requires a new seawall of approximately 60 m length;
- erosion hot spot at chainage 11,110 m, in the Anabar district, which requires a new seawall of approximate 30 m length; and
- erosion hot spot at chainage 13,490 m, in the Anibare district, which requires a new seawall of approximate 40 m length.

Landfill site

The landfill site in Nauru continues to be “poor” condition and there are no improvements since the previous site inspection in 2018. The solid waste is either burnt or buried and compacted .at a high ground location. There is no provision for collection of leachate or vent pipes, and this may create environmental issues if leachate overflows and contaminates the soil and this, is a concern considering the landfill site is located close the Buada district freshwater lagoon. Outside the landfill site, there are an increasing number of scrap passenger vehicles, abandoned along the road, l which need to be recycled or disposed of in an environmentally friendly manner.

3.4. Ongoing maintenance and funding

Ongoing maintenance and condition assessment of the infrastructure is essential to ensure assets continue to provide intended services over their full design life. Lack of adequate maintenance is resulting in irreversible asset impairment, which not only causes shortening of assets’ service life, but also leads to frequent asset breakdowns, disrupting public services and requiring emergency repairs at a much greater cost than what it would cost to perform preventative maintenance. Lack of technical skills and inadequate maintenance funding are the main reasons that contribute to poor economic performance of infrastructure investments in Nauru.

The required funding level for annual infrastructure asset maintenance in Nauru, expressed in 2023 base AUD, is shown above in Table 5. In addition to providing adequate funding for maintenance, lack of trained staff with required skill sets, is another bottleneck, that needs to be addressed to improve asset management practices in Nauru.

Various categories of infrastructure assets demand diverse technical expertise to proficiently oversee the processes of asset procurement, installation, maintenance, and condition assessment. It is recommended to expand and strengthen the technical resources of DOID, so they can assume the expanded organizational responsibility and accountability for budgeting and asset management tasks related to education, health, and public service buildings, in addition to the roads and coastal protection infrastructure. It is noteworthy that DOID is not currently resourced to carry out the additional responsibilities proposed above and would require organization strengthening, as described in **Appendix D**, to successfully carry out the additional tasks.

Aside from the routine maintenance activities, there is a significant backlog of infrastructure repair, renewal, and replacement activities which would require additional project management resources for approximately three years. Existing project management and technical skills within some of the better-managed SOEs, such as NUC or NRC, could be leveraged as a domestic source of expertise during this short period, in addition to this it is recommended that DOID & PAD continue to rally for support through TA programs. Job descriptions as well as performance evaluation criteria for the technical positions, with the required qualifications and experience should be created.

Ongoing maintenance and condition assessment of the infrastructure is essential to ensure assets continue to provide intended services over their full design life. The presence of asbestos products also creates a challenge for Nauru.

4. Early-Stage Screening Process

4.1. 2019 NIISP Achievement

The long list of projects assembled in 2019 consisted of 82 projects across 15 agencies.

Table 6 summarizes the status of those projects from the 2019 list that we were able to establish the status of. Some of the unfunded projects were rolled into the 2023 long list.

A key goal of the NIISP is to focus investments by proposing a priority list of investments. Table 7 reports on the status of the top 20 ranked projects from 2019 as of October 2023.

Table 6: Status of 2019 Long List Projects

Status	Count	Percent
Complete / Ongoing / Appraising	34	41%
Abandoned / Cancelled	6	7%
Unfunded (still in the pipeline)	20	25%
Not yet known	22	27%
	82	100%

Source: Agency review of 2019 NIISP long list

Table 7: Status of Top 20 Scoring Projects from 2019 MCA

Ref	Project Name	Cost Est. (AUD,000)	Status
DOH-R-5	Renovate the old building as a maternity ward	320	Ongoing
DOE-R-1	Renovate two classrooms for NPS	120	Complete
DOH-R-7	Renovate the old building as an isolation ward	350	Complete
NUC-R-53	Relining of 4 C tanks	160	Complete
DOH-U-28	Construction of nursing home	4,500	Unfunded
DOH-R-9	Redevelopment of the old ward for pediatrics.	480	Repackaged
NRC-R-17	Improvements to a landfill site	1,400	Appraising
NUC-N-46	6.5 MW PV & 5 MW battery storage	33,400	Ongoing
NRC-R-18	Relocate medical waste incinerator to landfill site	20	Complete
DOE-U-20	Renovate two additional classrooms NPS	120	Complete
DOE-U-21	One new classroom for Kaiser College	75	Complete
DOT-U-32	Addition of two sets of traffic lights on Simpson Rd	77	(no info.)
DOE-U-25	Sanitary facility, 5 community centers, and storage room	17	Cancelled
DOT-R-12	Rehabilitate draining sumps & soak pits	300	Complete
DOT-R-42	Purchase of 2 large and 2 smaller buses	222	Ongoing
DOH-U-27	Phase 3 renovations hospital improvements	4,000	Repackaged
NUC-N-51	Pipeline from Aiwo to RON hospital	500	Unfunded
PSA-R-4	Government Admin Building renovation	500	Unfunded
DOT-R-14	Resealing and repairing existing roads	14,000	Repackaged
CIE-R-19	Septage new treatment plant for the country	6,000	Appraising

Source: Agency review of 2019 NIISP long list

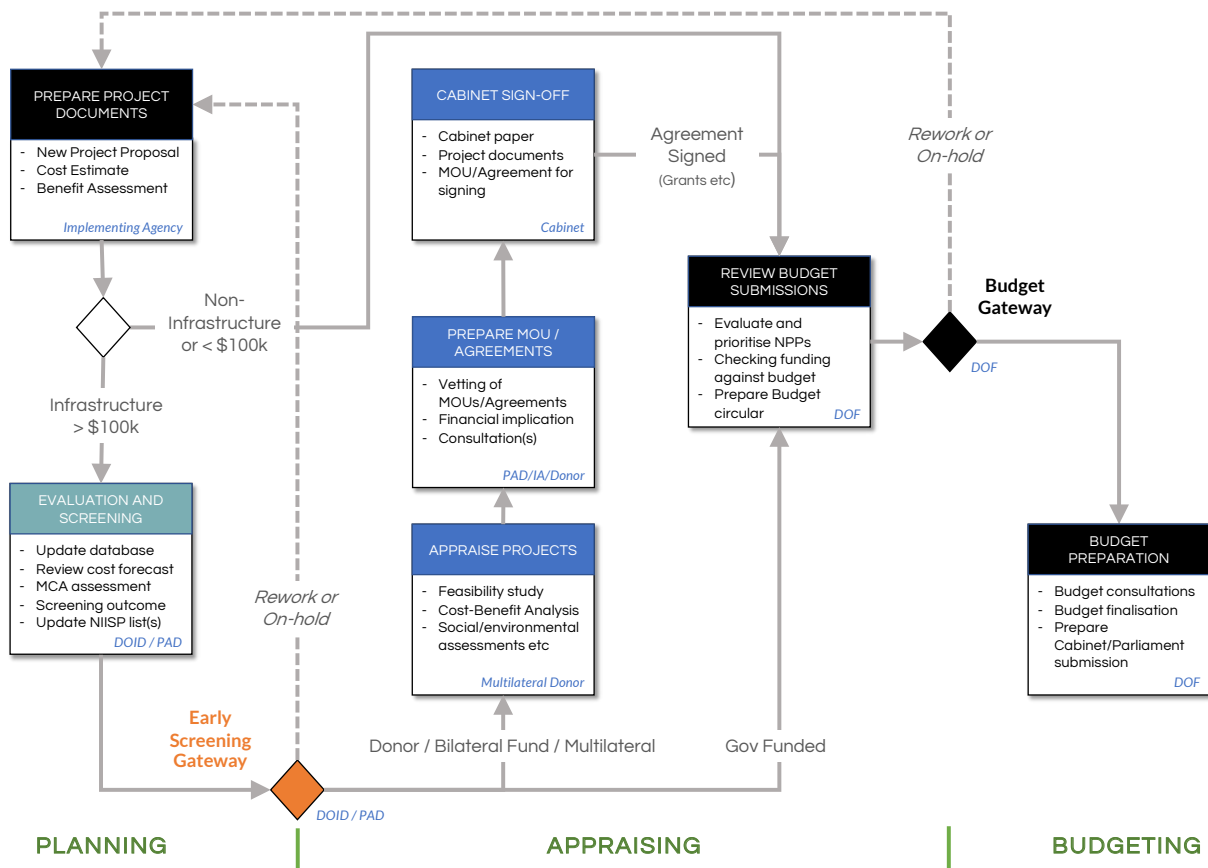
From the 20 top-ranking projects in 2019, 11 (55%) have progressed to the budget or are physically complete in 2023, and a further 7 (35%) have been repackaged or have been carried across as unfunded pipeline projects for consideration in the updated NIISP. This shows a greater level of implementation action on the priority projects (Table 6) than the long-list portfolio of projects (Table 7).

4.2. Infrastructure Funding Process

Agencies are required to submit a New Project Proposal (NPP) form to PAD of the Department of Finance for all capital development projects requiring government or donor funding. PAD then completes an evaluation of the relative strength of the project's alignment with NSDS's 24 goals in determining which priority projects should qualify for funding.

As it can take 2–4 years to secure donor funding and cabinet approval, there is always a backlog of NPPs with PAD awaiting a suitable funding source. Early-stage screening of infrastructure projects will establish a longer-term planning horizon and better prepare NPPs for submission in the budget cycle.

Figure 3: Early-Stage Screening Prior to Budget Approval



Notes: MOU = Memorandum of Understanding, DOID = Department of Infrastructure and Development, PAD = Planning and Aid Division, IA = Infrastructure Agency, DOF = Department of Finance

The two-stage gateway (early-stage screening and approval for budget) allows agencies to canvas projects with donors and government earlier in the delivery cycle and also allows DOID/PAD to better coordinate project discussions with national priorities. This early-stage screening and publication of the NIISP priority list does not impact urgent projects (e.g., disaster recovery) from being fast-tracked into the budget if required.

4.3. Multi-Criteria Analysis Framework

An important aspect of the early-stage screening process is the adoption of a robust project prioritization framework. To ensure that the prioritization framework reflects national priorities, the framework utilizes the high-level goals and objectives of the NSDS to identify the key drivers for infrastructure provision. The framework has been designed to allow prioritization of all projects, regardless of sector, using a single set of criteria.

The prioritization process utilizes an MCA framework to provide this function. An MCA provides a systematic approach for supporting complex decisions according to pre-determined criteria and objectives. MCA is particularly suitable for complex decision problems that involve multiple and conflicting objectives and criteria. It allows us to identify a single preferred alternative, or to rank or short-list possible alternatives. This is particularly important where traditional economic appraisal metrics, such as internal rate of return are not available or appropriate, as is the case in Nauru. Most, if not all, infrastructure investments in Nauru will not be economically viable in the traditional sense, given the high costs involved in implementation and the small size of the population, meaning that rates of return are unlikely to ever meet international benchmarks. Were these metrics to be used to define investment priorities, then only a very small program would be possible. By incorporating economy- and finance-related criteria within the MCA framework, these aspects are dealt with robustly, but without relying upon formal economic appraisal. MCA provides a framework to explore trade-offs between viability and other factors in determining priorities.

It is clear from previous infrastructure investment plans developed for other Pacific Island Countries, that linking the criteria used for project prioritization to published national development objectives, is essential in achieving general agreement on the criteria to be used in the NIISP and achieving a fundamental goal of the MCA – to prioritize projects based on how well they deliver on the goals of the nation. The key national policy and strategy document for Nauru is the NSDS. As described in Section 2.1, the NSDS sets out a series of strategic objectives for Nauru (Figure 4).

It is important when defining the criteria to be used for prioritization to ensure they can properly reflect the different types of projects to be assessed. This is particularly important where a wide range of projects, with different objectives, are to be compared with one another. The challenge here is to ensure that there is sufficient differentiation between the projects of different types.

At the same time, it is important that the framework can be implemented, including a limited number of criteria. Typically, this requires between 10 and 12 criteria. Given the wide-ranging nature of the projects to be prioritized for this NIISP, 12 criteria were selected. This number of criteria is considered sufficient to avoid the issue of not being able to differentiate between projects, while not being overly cumbersome. This number of criteria also reduces issues related to the subjectivity of the assessment. As the criteria are mainly qualitative, it is likely that individuals from different sectors or different disciplines will have different perspectives and therefore give different scores. The criteria selected should minimize the effect of this (Table 8). Detailed criteria are shown in **Appendix E**.

Figure 4: NSDS Goals



Source: Nauru's National Sustainable Development Strategy (NSDS 2019 – 2030)

Table 8: Multi-Criteria Assessment Framework Criteria

Economy

1. Enhance the Provision of Social Services, Infrastructure or Utilities

Is the project likely to enhance the provision of social services, infrastructure, or utilities?

2. Development of an Economy Based on Multiple Sources of Revenue

Is the project likely to help to diversify and strengthen the economy of Nauru?

3. Development of Domestic Food Production for Food Security

Will the project contribute to increasing domestic food production?

Social

4. Access to Quality Education and Training

Is the project likely to enhance the education system and learning outcomes for Nauruans?

5. Improve Health and Wellbeing

Will the project improve the long term health and well-being of all Nauruans?

6. Empower and Develop the Workforce

Is the project likely to deliver greater opportunities and representation for all Nauruans?

Environment

7. Improve Resilience to Climate Change and Natural Disasters

Will the project mitigate the impact of climate change or is it designed to be climate resilient?

8. Rehabilitate and Restore Degraded Lands

Is the project likely to support efforts to restore degraded lands and increase the availability of land for economic and social uses?

9. Deliver a Positive Impact on the Environment

Will the project improve the environment in Nauru and reduce harmful emissions and/or pollution?

Effectiveness

10. Linkage with Other Infrastructure

How will the project integrate with and improve the sustainability of existing infrastructure?

11. Reduce Whole-of-Life Costs

Will the ongoing costs of operation and maintenance be affordable within the existing Government budget?

12. Improve Overall Financial Position

How will the project improve the overall financial sustainability of the infrastructure sector?

Source: Authors

The correlation between the NSDS goals and the criteria adopted for this NIISP is shown in Table 9.

Table 9: Correlation between NSDS Goals and MCA Criteria

MCA Criteria	G1	G2	G3	G4	G5	G6	G7
1. Enhance the Provision of Social Services, Infrastructure or Utilities				●			
2. Development of an Economy Based on Multiple Sources of Revenue					●		
3. Development of Domestic Food Production for Food Security							●
4. Access to Quality Education and Training		●					
5. Improve Health and Wellbeing			●				
6. Empower and Develop the Workforce		○					
7. Improve Resilience to Climate Change and Natural Disasters						●	
8. Rehabilitate and Restore Degraded Lands						●	
9. Deliver a Positive Impact on the Environment	○					○	
10. Linkage with Other Infrastructure				○			
11. Reduce Whole-of-Life Costs	○						
12. Improve Overall Financial Position	○						

● – Primary Link | ○ – Secondary Link

Note G1-G7 legend:

Goal 1: Stable, trustworthy, fiscally responsible government

Goal 2: Access to quality education, formal and non-formal

Goal 3: Improved health and well-being

Goal 4: Provision of enhanced social, infrastructure, and utilities services

Goal 5: Development of an economy based on multiple sources of revenue

Goal 6: Enhance resilience against climate change that is inclusive of rehabilitating and restoring degraded lands

Goal 7: Development of domestic food production for food security

Source: Authors

Using an MCA framework allows applying different weights to individual criteria, or a group of criteria. However, determining appropriate weights to be applied can be a long and involved process, involving considerable work with stakeholders to explore different tradeoffs. It has not been possible to undertake

this process during the development of this NIISP. The decision was therefore taken to apply equal weighting to all criteria. To test the possible impact of applying alternative weights, a series of sensitivity tests were also completed.

Nauru is having to diversify its sources of revenue as phosphate mining is phased out.



5. Priority Development Projects (2024+)

5.1. Capital Infrastructure Projects

Section 1.3 provides guidance on the definition of projects to be included in the NIISP, broadly categorized as capital infrastructure development projects over \$100,000. The process for unearthing the long list of capital development projects to be included in the NIISP involved:

- A review of the project list from 2019 to confirm the current status of those projects, as shown in Section 4.1;
- Extensive consultation with Government Departments and others to identify planned or proposed projects ²;
- An independent review of current asset condition, to identify priorities for rehabilitation or strengthening of existing assets, as set out in Section 3.3.

Following these stages, 145 projects were identified, including ongoing, budgeted, appraising, and planned/pipeline opportunities. The assembled project database is included in **Appendix F with a summary of this long list presented in the tables below.**

Table 10: Summary of Projects by Agency

Department	Code	No. Projects
CENPAC (Teleco Provider)	CENPAC	1
Department of Commerce, Industry and Environment	DEMA	2
Department of Civil Aviation	DCA	2
Department of Climate Change and National Resilience	DCCNR	11
Department of Education and Training	DOET	9
Department of Environmental Man. and Agriculture	DEMA	1
Department of Health	DOH	9
Department of Infrastructure Development	DOID	23
Department of Justice	DOJ	1
Department of Media	DOM	7
Department of Sports	DOS	13
Department of Transport	DOT	11
Nauru Emergency Services	NES	6
Nauru Fisheries and Marine Resources Authority	NFMRA	1
Nauru Maritime and Ports Authority	NMPA	9
Nauru Police Force	NPF	4
Nauru Rehabilitation Corporation	NRC	7
Nauru Utilities - Energy	NUC-E	11
Nauru Utilities - Water	NUC-W	5
Public Service Administration	PSA	3
Technical and Vocational Education College	TVET	8
Vital Energy	VEI	1
	Total	145

Source: Analysis of NIISP project database

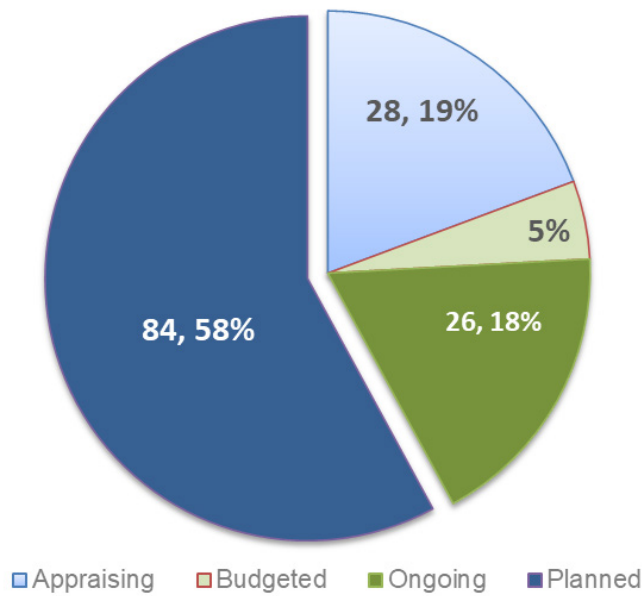
² See Appendix A for the list of organizations consulted

Table 11: Summary of Projects by Type and Status

Type	Ongoing	Budgeted	Appraising	Planned	Total
New	14	3	15	35	68
Upgrade	5	1	4	21	31
Renewal	4	2	2	14	22
Maintenance			2	4	6
Purchase			2	5	7
Tech. Assist.	3	1	3	5	12
Grand Total	26	7	28	83	145

Source: Analysis of NIISP project database

Figure 5: Summary of Projects by Status



Source: Analysis of NIISP project database

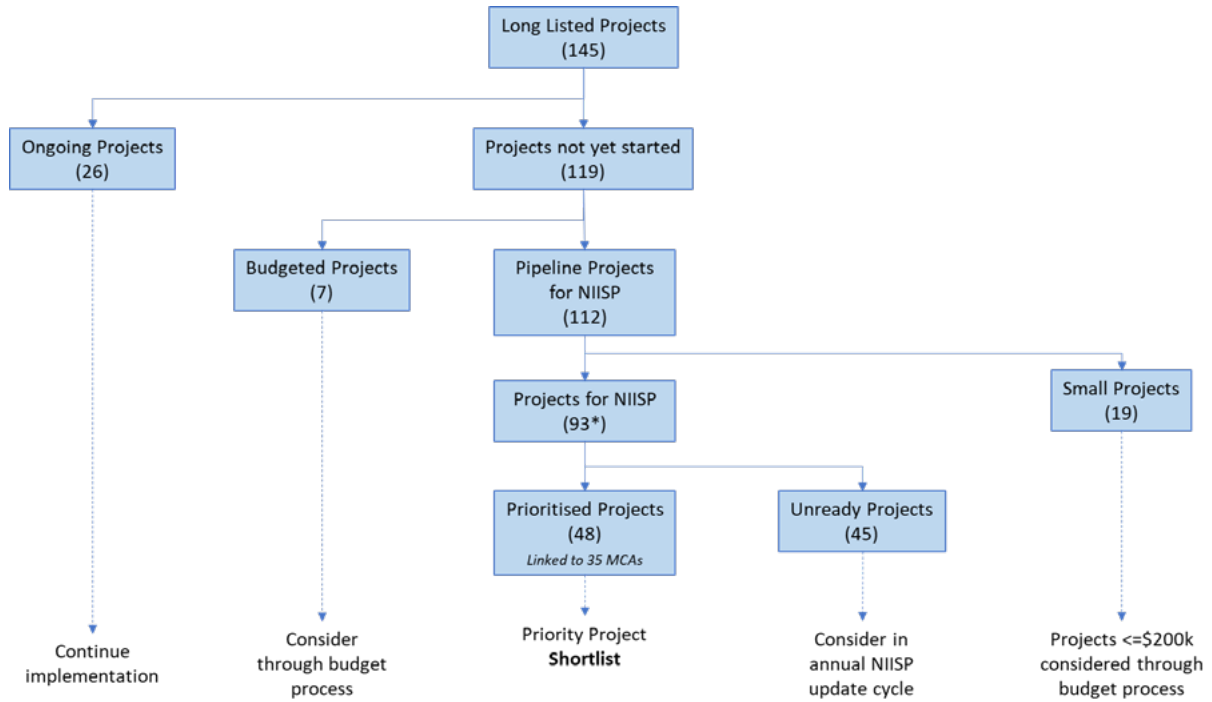
5.2. Screening Results

The 145 projects on the long list were assessed to determine their state of readiness, financial size, and current position within the budgeting process, using the filtering process in Figure 6.

This identified that of the 145 projects, 33 were already either ongoing or have been incorporated into the Government budget process. Of the rest, 19 are estimated to be below the minimum financial threshold for the NIISP. 45 projects have been assessed as not being sufficiently well developed to be properly prioritized at this stage, leaving 48 projects to be incorporated into the shortlist and subjected to the MCA process and prioritization.



Figure 6: Project Screening Outcome Summary



Source: Authors

5.3. Priority Short List

As set out above, the result of the initial screening of the long-listed projects was a short list of 48 projects, which are above the minimum size threshold and sufficiently developed to be considered as part of the prioritization process.

Table 12 summarizes the number of shortlisted projects, put forward by each Department. The projects included within the shortlist are shown in Table 13 below.

Table 12: Shortlisted Projects by Department

Department	Number
Department of Climate Change and National Resilience	1
Department of Environmental Management and Agriculture	1
Department of Health	3
Department of Infrastructure Development	14
Department of Transport	1
Department of Sports	8
Nauru Utilities - Energy	6
Nauru Utilities - Water	3
Nauru Police Force	3
Nauru Emergency Services	1
Public Service Administration	2
Nauru Fisheries and Marine Resources	1
Nauru Maritime and Ports Authority	1
Technical and Vocational Education College	3
Total	48

Source: Analysis of NIISP project database

Table 13: Summary of Shortlisted Projects (48)

Ref.ID	Name	Est. Cost (A\$,000)		Agency
AIR-11	Nauru Airport Terminal Redevelopment Program	20,000.0	Aviation	DOT
EDU-21	Hospitality Kitchen Improvements	3,000.0	Education	TVET
EDU-24	Engineering Industrial Workshop Improvements	3,000.0	Education	TVET
EDU-25	New Multipurpose Building for Life Skills	5,000.0	Education	TVET
EMG-11	Replacement of Fire Trucks	2,000.0	Emergency	NES
ENE-13	RPC 2 Grid Extension	900.0	Energy	NUC-E
ENE-14	Buada Low Voltage Underground Cable Upgrade	1,200.0	Energy	NUC-E
ENE-18	Upgrade Substation at Location Area	1,500.0	Energy	NUC-E
ENE-19	Upgrade 3.3kva Switch Gear at Power Station	1,102.0	Energy	NUC-E
ENE-20	Upgrade RMN, RME, and RMS Power Transformers	1,396.0	Energy	NUC-E
ENE-23	Acquire a New 16m Cherry Picker	250.0	Energy	NUC-E
ENV-13	CPP: Renewal of Seawalls (Aiwo Hotel)	396.0	Environment	DOID
ENV-14	CPP: Renewal of Seawalls (north of new port - 82m)	492.0	Environment	DOID
ENV-15	CPP: Renewal of Seawalls (north from new port - 386m)	2,316.0	Environment	DOID
ENV-16	CPP: Renewal of Seawalls (Menen Hotel - 414m)	2,484.0	Environment	DOID
ENV-17	CPP: Construction of Seawalls (Anetan locations)	324.5	Environment	DOID
ENV-19	CPP: Construction of Seawalls (Anibare locations)	220.0	Environment	DOID
ENV-27	New Seawall Behind the Central Police Station	770.0	Environment	DOID
ENV-25	Coastal Protection Program (CPP)	2,000.0	Environment	DOID
ENV-23	CPP: Repairs to Existing Seawalls (riprap)	400.0	Environment	NPF
HEA-14	New Renal Dialysis Unit Building	2,000.0	Health	DOH
HEA-18	Redevelopment of Naoero Public Health Centre	53,000.0	Health	DOH
HEA-19	Redevelopment of RON Hospital	93,000.0	Health	DOH
JUS-12	Maritime Police Unit	500.0	Justice	NPF
JUS-13	Upgrading the Police Training College	500.0	Justice	NPF
LAN-13	Capital Repairs to Sealed Road Program (SRRP)	14,000.0	Land	DOID
LAN-14	Barrier Railing – Airport Ring Road	529.0	Land	DOID
LAN-15	SRRP: Rehab. of NPC Road and Access Roads	2,000.0	Land	DOID
LAN-16	SRRP: Rehabilitation of Boe School Access Road	250.0	Land	DOID
LAN-17	SRRP: Improving Drainage on Ring Road	750.0	Land	DOID
LAN-18	SRRP: Capital Repairs to Roadside Curbs and Drainage	250.0	Land	DOID
LAN-30	Extension of Meneng Farm	20,000.0	Land	DEMA
MAR-12	Heavy Lifting Solution - Crane	4,500.0	Maritime	NMPA
PUB-13	Reconstruction of Internal Affairs Buildings at Meneng Hill	1,000.0	Pub.Building	NFMRA
PUB-11	Refurbishment of Aquaculture Holding Centre	1,300.0	Pub.Building	PSA
PUB-17	Master Plan to Consolidate Government Buildings	400.0	Pub.Building	PSA
SPO-12	Micronesia Games 2026 Infrastructures Program (MGIP)	14,500.0	Recreation	DOS
SPO-14	MGIP: Grandstand Stadium with Indoor Sports Hall	8,000.0	Recreation	DOS
SPO-15	MGIP: Mini Sports Halls	1,500.0	Recreation	DOS
SPO-16	MGIP: High-Performance Center	750.0	Recreation	DOS
SPO-17	MGIP: Land Site Preparation and Access Road	4,100.0	Recreation	DOS
SPO-18	MGIP: Renovation of Existing Sports Courts	1,000.0	Recreation	DOS
SPO-19	Sporting Equipment and Accessories	2,500.0	Recreation	DOS
SPO-20	MGIP: Games Village	6,500.0	Recreation	DOS
WAS-16	Water Storage Tank Upgrade	60,156.3	WaterSewer	DCCNR

Table 13: Summary of Shortlisted Projects (48) (continued)

Ref.ID	Name	Est. Cost (A\$,000)	Agency
WAS-13	Nauru Sustainable Urban Development Program	350.0	WaterSewer NUC-W
WAS-19	NSUDP: Water Supply Pipeline	37,400.0	WaterSewer NUC-W
WAS-20	NSUDP: Sanitation Upgrade	28,000.0	WaterSewer NUC-W

Note: Sorted by Sector. Refer Table 10 for full Agency names.

Source: Analysis of NIISP project database.

5.4. Assessment of Priority Projects for Future Development

A two-stage process was followed to complete the prioritization of longlist projects, based upon the framework set out above. Initially, each project was scored by the respective project promoter. This provided the opportunity for those proposing each project to put forward the case for investment. However, it is inevitable with a complex MCA framework that different people will interpret the criteria slightly differently. To balance this and the unconscious tendency for people to favor “their” project, the NIISP consultants undertook a **moderation process**, where the scores allocated were reviewed to ensure consistency in both interpretation and scoring. Where necessary, scores were moderated up and down to provide consistency in the resulting priority list. This resulted in the ranking shown in Table 14 below. The scores allocated to each project, against each criterion, are shown in **Appendix E** of this report. The criteria used and the resulting scores have been reviewed and approved by the NIISP Steering Committee, made up of senior officials from within the Government of Nauru, as part of the development of this NIISP.

The purpose of completing the MCA impact assessment is twofold:

- 1) It describes the benefits the projects will deliver, and by design, their relative alignment with the NSDS goals, in a structured comparable format across projects.
- 2) It allows objective scoring of the projects to enhance decision-making about which projects deliver the greatest impact (economic, social, and environmental).

Ultimately the MCA process generates a weighted impact score for the project that can be compared across the portfolio. While this provides a useful comparison of the relative impact a project will have, it is not the only mechanism by which the government ultimately determines which projects should receive funding.

As one example, a development partner may have a fund aligned to a particular strategic goal, such as the Green Climate Fund, which was established in response to climate change by investing in low-emission and climate-resilient development. To access this fund, the Government of Nauru and development partners would look specifically at projects that achieved a high “Environmental” impact score and specifically, those that scored a 10 against this category.

For this reason, Table 14 presents the results of the MCA analysis as an ordered listing of the projects sorted on the weighted impact score along with the raw score (out of 10) for the grouped criteria bands of Economic, Social, Environmental, and Efficiency.

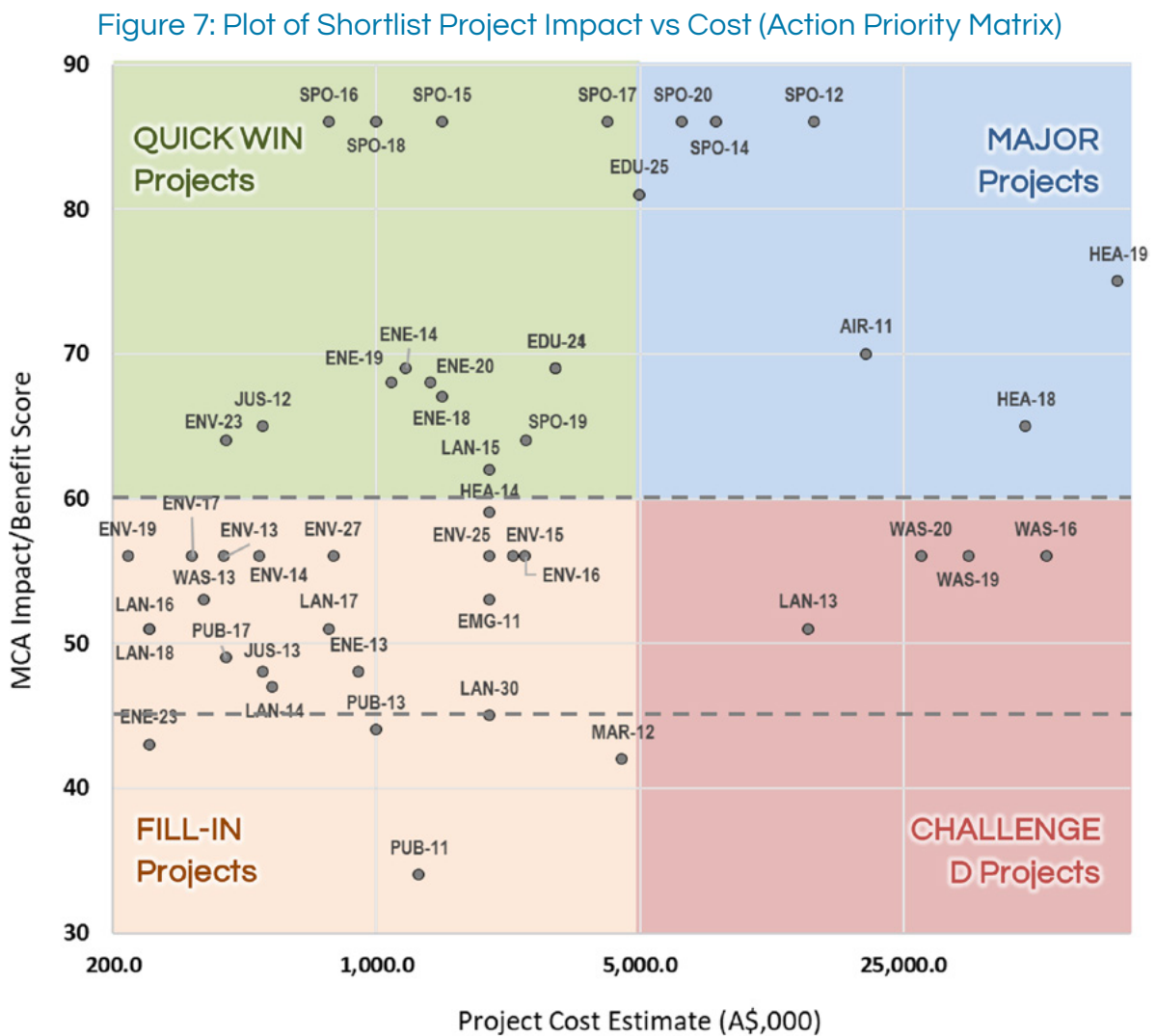
In determining the sequence for projects to be implemented, it will also be important to assess the inter-linkages and dependencies between projects (e.g. those associated with the Micronesian Games), to ensure that where projects rely upon each other, utilize similar resources, or where one is needed to enable another, projects are implemented in the correct order.

Another technique to aid screening projects is to plot projects on an x-y axis representing the impact the project will have against the effort (or cost) to implement. This is known as an Impact-Effort Matrix or an Action Priority Matrix.

Once plotted, activities can then be considered within four quadrants:

1. **Quick Wins** (*higher impact, lower effort*): These are generally the most attractive projects because they give you a good return for less effort.
2. **Major Projects** (*higher impact, higher effort*): Major projects give good returns, but they are time-consuming and often difficult to deliver. This means that one major project can “crowd out” many quick wins. Care should be taken not to attempt too many Major Projects in parallel.
3. **Fill-Ins** (*lower impact, lower effort*): These projects generally progress when they are foundational or part of a bigger program of related works – otherwise they are delivered when time permits.
4. **Challenging Projects** (*lower impact, higher effort*): Projects in this quadrant require more preparation to progress and are aligned with fewer strategic goals and need more resources and time to implement.

Figure 7 uses this concept to plot projects based on their overall impact score and the capital costs of the project (as a pseudo-measure of scale/effort).



MCA = multi-criteria analysis.
 Source: NIISP Project Screening

Table 14: Ranked Summary of MCA on Project Shortlist

Ref.ID	Name	Est. Cost (A\$,000)	MCA Score	Eco. (1)	Soc. (2)	Env. (3)	Eff. (4)
SPO-12	Micronesia Games 2026 Infrastructures Pgm (MGIP)	14,500.0	86	16	23	24	23
SPO-14	MGIP: Grandstand Stadium with Indoor Sports Hall	8,000.0	86	16	23	24	23
SPO-20	MGIP: Games Village	6,500.0	86	16	23	24	23
EDU-25	New Multipurpose Building for Life Skills	5,000.0	81	18	23	20	20
HEA-19	Redevelopment of RON Hospital	93,000.0	75	16	19	14	26
AIR-11	Nauru Airport Terminal Redevelopment Program	20,000.0	70	20	9	14	27
HEA-18	Redevelopment of Naoero Public Health Centre	53,000.0	65	13	19	11	22
SPO-15	MGIP: Mini Sports Halls	1,500.0	86	16	23	24	23
SPO-16	MGIP: High-Performance Center	750.0	86	16	23	24	23
SPO-17	MGIP: Land Site Preparation and Access Road	4,100.0	86	16	23	24	23
SPO-18	MGIP: Renovation of Existing Sports Courts	1,000.0	86	16	23	24	23
EDU-21	Hospitality Kitchen Improvements	3,000.0	69	19	26	11	13
EDU-24	Engineering Industrial Workshop Improvements	3,000.0	69	12	23	14	20
ENE-14	Buada Low Voltage Underground Cable Upgrade	1,200.0	69	12	6	21	30
ENE-19	Upgrade 3.3kva Switch Gear at Power Station	1,102.0	68	22	6	14	26
ENE-20	Upgrade RMN, RME, and RMS Power Transformers	1,396.0	68	22	6	14	26
ENE-18	Upgrade Substation at Location Area	1,500.0	67	20	6	14	27
JUS-12	Maritime Police Unit	500.0	65	19	12	14	20
ENV-23	New Seawall Behind the Central Police Station	400.0	64	9	9	20	26
SPO-19	Sporting Equipment and Accessories	2,500.0	64	13	23	9	19
LAN-15	SRRP: Rehab. of NPC Road and Access Roads	2,000.0	62	9	6	27	20
HEA-14	New Renal Dialysis Unit Building	2,000.0	59	6	19	11	23
ENV-25	Coastal Protection Program (CPP)	2,000.0	56	3	6	30	17
ENV-13	CPP: Renewal of Seawalls (Aiwo Hotel)	396.0	56	3	6	30	17
ENV-14	CPP: Renewal of Seawalls (north of new port - 82m)	492.0	56	3	6	30	17
ENV-15	CPP: Renewal of Seawalls (north from new port - 386m)	2,316.0	56	3	6	30	17
ENV-16	CPP: Renewal of Seawalls (Menen Hotel - 414ms)	2,484.0	56	3	6	30	17
ENV-17	CPP: Construction of Seawalls (Anetan locations)	324.5	56	3	6	30	17
ENV-19	CPP: Construction of Seawalls (Anibare locations)	220.0	56	3	6	30	17
ENV-27	CPP: Repairs to Existing Seawalls (riprap)	770.0	56	3	6	30	17
EMG-11	Replacement of Fire Trucks	2,000.0	53	16	3	11	23
WAS-13	Water Storage Tank Upgrade	350.0	53	13	6	17	17
LAN-16	SRRP: Rehabilitation of Boe School Access Road	250.0	51	9	12	14	16
LAN-17	SRRP: Improving Drainage on Ring Road	750.0	51	9	12	14	16
LAN-18	SRRP: Capital Repairs to Roadside Curbs and Drainage	250.0	51	9	12	14	16
PUB-17	Master Plan to Consolidate Government Buildings	400.0	49	6	0	17	26
ENE-13	RPC 2 Grid Extension	900.0	48	9	6	17	16
JUS-13	Upgrading the Police Training College	500.0	48	9	16	4	19
LAN-14	Barrier Railing – Airport Ring Road	529.0	47	6	9	12	20
LAN-30	Extension of Meneng Farm	2,000.0	45	16	12	7	10
PUB-13	Refurbishment of Aquaculture Holding Centre	1,000.0	44	19	6	11	8
ENE-23	Acquire a New 16m Cherry Picker	250.0	43	10	6	4	23
MAR-12	Heavy Lifting Solution - Crane	4,500.0	42	12	3	11	16
PUB-11	Recon. of Internal Affairs Buildings at Meneng Hill	1,300.0	34	3	12	6	13
WAS-16	Nauru Sustainable Urban Development Program	60,156.3	56	13	6	17	20
WAS-19	NSUDP: Water Supply Pipeline	37,400.0	56	13	6	17	20
WAS-20	NSUDP: Sanitation Upgrade	28,000.0	56	13	6	17	20
LAN-13	Capital Repairs to Sealed Road Program (SRRP)	14,000.0	51	9	12	14	16

Note: Table is sorted by MCA Rating and Action-Priority Quadrant (legend below)

Major Project
 Quick Win Project
 Fill-In Project
 Challenging Project

From Figure 7, we see four useful bands for analysis. The first two bands cover those projects with a weighted score ≥ 60 (High Impact) having very strong overall benefit followed by those projects rated 45-60 (Moderate Impact) also having a good, combined impact score. A third band forms for projects rated < 45 (Low Impact). These projects might have strong benefits in a particular area (e.g., a building upgrade that scores high on efficiency) and hence could be picked up under special government funding as it reduces ongoing costs. These low-impact projects are likely to require closer scrutiny to ensure they return sufficient overall benefits to the government and the community.

It is recommended that following the initial scoring (as presented in Table 14) projects should be grouped, reflecting their relative impact, and de-emphasizing the specific score and inter-project ranking.

The primary goal of the MCA process, which it achieves in this plan, is to move the discussion toward the relative impact a project delivers in terms of triple bottom-line reporting and evaluation of social, environmental, and economic impacts. The framework also encourages agencies to consider the ongoing sustainability and costs of maintaining and operating the infrastructure once delivered and the scale of the project when balancing the portfolio.



6. Infrastructure Funding Strategy

6.1. Macro-Fiscal Conditions

Growth in the economy of Nauru has recovered since the COVID-19 pandemic, due to strong phosphate mining activities. However, inflation has risen in the same period reflecting external factors. The economy expanded by 2.9 percent in the 2022-23 fiscal year as strong phosphate production and sizable fiscal support to households and State-Owned Enterprises (SOEs) partially offset a weaker transportation sector hit by COVID-related restrictions and rising fuel prices ³.

After a strong performance in 2021-22, economic activity in Nauru moderated in 2022-23 reflecting the wind-down of the RPC towards enduring capability and is expected to moderate further in 2023-24. However, growth is expected to increase slightly in 2024-25. Recent real GDP growth has been as follows:

- 2020 - 21 3.4%
- 2021 - 22 2.9%
- 2022 - 23 2.0%
- 2023 - 24 1.5% (predicted)
- 2024 - 25 2.3% (forecast)

Table 15: Government Revenue Base 2023-24

Revenue Source	Amount
Grants, dividends, other financing	30.1m
Fisheries	54.5m
Import Duties	18.8m
Visa fees	1.2m
Tax	9.9m
Non tax	164.1m
Total	278.6m

Source: Government financial statements

Government revenue has been on a decreasing trend in recent years and is expected to continue in this pattern in 2023-24 and for the next two years. Expected revenues for 2023-24 are shown in Table 15. These revenues are substantially impacted by the RPC, with revenues of \$169 million in 2023-24. If, as seems likely, the transition to ending the agreement with Australia entirely will be accelerated after 2025-26, the economy will face a substantial reduction in revenues, significantly affecting the Government's ability to invest in infrastructure and to finance borrowing.

6.2. Historic Investment and Funding

Most funding for infrastructure development in Nauru comes from development partners. Sources of support vary both annually and over time, as can be seen in Table 16 below. However, funding levels from the main development partners remain high and have mostly increased in recent years. Much of this is provided as 'Aid in Kind' which denotes support that is directed from the donor itself, rather than through the Nauru Development Fund. For 2023-24 this Aid in Kind is expected to total \$98.1 million.

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Table 16: Sources of Development Partner Funding 2018 to 2024⁴

Donor	2018-19	2019-20	2020-21	2012-22	2022-23	2023-24
ADB	6,727,073	39,817,306	35,500,000	48,920,000	29,100,000	44,876,000
Australia	21,241,000	21,241,000	24,000,000	26,000,000	25,500,000	25,900,000
EU	389,042	1,213,287	470,535	-	-	-
GCF	-	-	29,475,000	-	-	-
Italy	62,496	50,000	-	-	-	-
Japan	3,309,648	264,840	4,480,000	2,210,000	6,725,000	4,125,000
Korea	-	-	-	-	739,053	739,053
New Zealand	977,250	4,732,250	3,120,000	4,631,927	3,385,191	7,143,931
Saudi Arabia	-	-	-	-	-	1,500,000
SPC	-	-	488,525	-	-	-
Taipei,China	12,836,354	12,836,354	19,116,267	20,010,013	17,812,472	22,438,270
UN	2,328,118	1,713,467	1,472,925	2,362,146	4,950,457	18,668,167
Total	47,870,981	81,868,504	118,123,252	104,134,086	88,212,173	125,390,421

ADB = Asian Development Bank, EU= European Union, GCF = Green Climate Fund, SPC = Pacific Community, UN = United Nations. Source: Republic of Nauru, 2023-24 Budget, Development Fund, Annual Projections FY2023-24.

Among traditional donors,⁵ the main changes relate to increased funding from the Asian Development Bank (ADB) related to port and solar power projects, increased support from New Zealand related to funding toward the ADB Economic Reform project, a general increase in support from Taipei,China, and a major increase in support from the UN under the new UN Sustainable Development Cooperation Framework 2023-27.

Among non-traditional donors,⁶ significant funding has been provided by the Green Climate Fund toward the port redevelopment project and the Pacific Community for the Global Climate Change Alliance Plus Scaling up Pacific Adaption. Both Republic of Korea and Saudi Arabia have recently provided general grant assistance.

Where budget support is provided, this is generally directed through the government’s consolidated fund. For 2023-24, total budget support is expected to be around \$24.4 million.

The third type of support is cash-funded, which involves development partners providing support to specific projects, with monies being directed through the Nauru Development Fund. The amount of this funding has been falling in recent years and, for 2023-24, is expected to be around \$2.9 million. As there was a carryover from 2022-23, the total development fund is estimated to be around \$8.5 million.

A useful breakdown of development partner funding is provided by comparing this with the NSDS sectors. Table 17 shows that most budget support is directed at the health and education systems and general administration. Aid in kind includes substantial funding for infrastructure, including in the health sector, and support to government through a series of advisors. Total funding for infrastructure is expected to be around \$51.4 million in 2023-24.

Table 17: Development Partner Funding by NSDS Sector 2023-24 (million)

Sector	Budget Support	Aid In Kind	Cash Supported	Total
Economic	16.8	24.2	0.1	41.1
Social	6.9	19.5		26.4
Infrastructure	0.4	48.2	2.8	51.4
Cross-cutting	0.4	6.2		6.5
Total	24.4	98.1	2.9	125.4

Source: Republic of Nauru, 2023-24 Budget, Development Fund, Annual Projections FY2023-24.

⁴ Republic of Nauru, 2023-24 Budget, Development Fund, Annual Projections FY 2023-24

⁵ Australia; ADB; Japan; New Zealand; Taipei,China; United Nations.

⁶ European Union, Green Climate Fund, Italy, Rep. of Korea, Saudi Arabia, SPC.

6.3.Future Funding Sources

Development partner grants

As discussed, Nauru has benefited from development partner grants for many years. These come from both bilateral and multilateral sources. Funding can be provided either as budget support or project-related funding. These have different funding modalities and reporting requirements, as well as levels of certainty in terms of future funding levels. As can be seen in Table 17, while the total development partner funding varies year on year, there has been a general upward trend in the total funding available to Nauru. It is unclear whether this upward trend will continue, but it is expected that current levels will be maintained.

Australia Department of Foreign Affairs and Trade

In recent years funding from Australia DFAT has amounted to between \$21 million and \$26 million from its bilateral program. This has been split between 4 sectors (health, education, governance, and infrastructure) in varying amounts. In addition, Australia has contributed to several other projects, usually working with other development partners, as shown in Section 0. Funding from Australia comes from 2 pots:

- a) a bilateral program, for which ongoing funding remains around \$25 million per annum; and
- b) regional program funding, which can vary considerably, depending upon project requirements.

Taipei, China

Over recent years funding levels from Taipei,China have been relatively stable, at around \$18 – 20 million per annum. This has mostly provided investment in specific projects and is expected to continue for the foreseeable future.

Asian Development Bank

ADB has been supporting Nauru since 1991, and cooperation has focused on improving fiscal sustainability, critical infrastructure, and service delivery. To date, ADB has committed 24 public sector loans, grants, and technical assistance totaling \$109.4 million to Nauru.⁷ ADB's ongoing sovereign portfolio in Nauru includes four grants worth \$63.3 million. The focus of ADB support includes the completion of the Aiwo Port and a solar power system; preparing an urban development project; and strengthening reforms in public sector management, SOEs, and social protection.

The future direction for ADB support is difficult to assess, as it largely depends upon the pipeline of fundable projects. However, it is expected that funding allocations toward Nauru will continue at a similar rate to recent years.

New Zealand Ministry of Foreign Affairs and Trade

New Zealand maintains a 4-year plan to guide its support to Nauru, with the current version running between 2021 and 2025. This sets out the strategic aims and objectives of the program, as well as detailing specific investments. New Zealand's partnership with Nauru has both a regional and a bilateral focus. No specific information is currently available regarding future funding levels from New Zealand, but it is assumed that current levels will be maintained.

⁷ ADB Member Fact Sheet, Nauru.

Nauru Intergenerational Trust Fund

The Nauru Intergenerational Trust Fund was established in 2015 with the main objective of generating future investment earnings that can be used to provide a source of revenue to the Republic of Nauru, post-2033, for investments in education, health, environment, and infrastructure. The intention of the Fund is that it will help smooth out income streams in the medium term and replace all, part, or supplement volatile future revenue.

Contributions to the Fund come from several sources, including the Government of Nauru and development partners. For the year 2020-21 (the latest figures available) total contributions were more than \$41 million. The total value of the Fund at the end of the 2020-21 year was \$218 million. The goal for the NTF is a fund value of \$400 million by 2033.

Public-private partnerships and the private sector

In many countries, the private sector is seen as a key partner in infrastructure provision, being able to leverage additional funding toward investing in infrastructure projects. A public-private partnership (PPP) is a formal mechanism whereby a government grants a concession to a private firm to develop an infrastructure project, in return for either user payments or government-backed availability payments. Such arrangements are particularly popular in the energy and transport sectors, where it is possible to set up straightforward user-pays systems.

The key advantages of PPP arrangements are that:

- the private sector brings investment capital to a project;
- the private sector can leverage international best practice in scheme design and operation;
- the private sector remains responsible for the operation and maintenance of the infrastructure for a period of time; and
- payments are either made direct from users, or through contracted payments from the government, providing more certainty in terms of government liabilities.

However, there are downsides to PPP projects, particularly as in many cases the projects are seen to be more expensive than a similar publicly procured project, and the government becomes contractually tied to ongoing payments.

While, overall, PPPs could be an interesting option, particularly for sectors such as power generation and distribution, transport and even public buildings, Nauru has little or no experience or track record in this type of arrangement. To implement a program of PPP projects, Nauru would need to instigate primary legislation in a range of areas related to:

- enabling private ownership of public infrastructure;
- removing or relaxing cross border currency movement controls;
- allowing multi-annual budgeting within government; and
- providing subsidies, or viability gap funding, to private sector investors.

6.4. Funding Modalities

Nauru Development Fund

The Nauru Development Fund was created through the Development Fund Act 2011, for the purpose of facilitating the funding of development projects. The fund is reported separately through the Development Fund Annual Projections, which are published alongside the annual budget. The Development Fund receives funding from development partners, either as budget support or as earmarked contributions to projects. Each of these amounts can vary substantially in size.

The Development Fund is used to manage both national capital funds and funds and contributions provided by development partners.

Proposed Infrastructure Trust Fund

Ongoing discussions between the government and development partners are investigating several different funding modalities for infrastructure. Most prominent among these is the concept of an infrastructure trust fund. This would most likely be focused on the health sector, as there are a few large projects therein, but could be expanded to other sectors.

The concept would involve the setting up of an externally managed fund, which would be used to attract funds from a variety of development partners toward larger projects. Many smaller development partners may have funds allocated toward a sector, but these are insufficient to fund a full project. The trust fund would allow all these funding pots to be amalgamated and utilized as a whole against major projects.

Funds would be held in a ring-fenced account, which would be managed by a fund management partner, most likely a project management consultancy funded by one or more development partners. The fund would adopt many of the existing government processes and procedures but would add an additional layer of fund protection.



7. Improvement Plan

7.1. Process and Systems Development

Opportunity # 1: Nauru Infrastructure Asset Register Updates

The Government of Nauru is committed to maintaining the records and information in the Infrastructure Asset Register and Maptive geographic information system through periodic updates that would place pertinent decision support information at asset managers' fingertips. This will be accompanied by the creation of a "Centre of Excellence" within the DOID, to bring together all the required skills and talents required to manage critical public sector infrastructure under one roof. The responsibilities and accountabilities for update of the asset register are described in **Appendix D**.

Opportunity # 2: Adopt PRIF Methodology for Infrastructure Asset Management

The Government of Nauru is committed to an objective and transparent asset management approach compliant with the principles of internationally accepted asset management standard ISO-55000. All government departments and SOEs responsible for managing public infrastructure will periodically assess the condition of assets under their control, using the "methodology for Infrastructure condition assessment in pacific island countries" published by PRIF and plan investments into asset repair, renewal, and replacement based on the risk of the asset failures.

Opportunity # 3: Implement New Building Standards

The overall condition of Nauru's infrastructure stock is stagnant, despite increasing investment in rehabilitation. A lack of adequate project planning, use of specifications and standards that are not suitable for Nauru's harsh operating environment, poor workmanship, and absence of quality controls during infrastructure construction are known to be contributing to this lack of progress.

The government is in the process of developing and adopting a new building code, with design and construction standards for buildings. These will be formally adopted by Parliament and passed into law. An effective system for the implementation and enforcement of the new standards will be put in place.

Opportunity # 4: Increase Levels of Infrastructure Maintenance

The government is committed to implementing a proactive infrastructure maintenance program to target reductions in accelerated infrastructure aging and premature impairment of infrastructure assets. The maintenance program will include preventative maintenance, asset condition assessment, as well as corrective repairs and rehabilitation, as detailed in the "Methodology for Condition Assessment of Infrastructure Assets in Pacific Island Countries" published by PRIF.

Opportunity # 5: Enhance Whole-of-Life Organizational Behaviors

Improving the operating performance and life expectancy of infrastructure and reduce donor fatigue in refinancing capital investments in Nauru would require a step change in the organizational behavior of all government institutions and departments.

Some of the weaknesses in current organization structure that require strengthening include:

- Lack of competencies and skills – it is essential that people responsible for managing infrastructure have the required competencies, skills, and training, including technical skills and project management and contract administration skills. Due to Nauru’s small size, it is unlikely to be sustainable to create and support teams with these skills in every sector. The government is therefore committed to creating a center of excellence within the DOID to place the management of all critical infrastructure under a single entity.
- Lack of accountability – there need to be objective, transparent, and realistic goals related to infrastructure performance for each position within the infrastructure and bi-annual and annual performance reviews. Government will investigate the implementation of financial incentives to high-performance asset managers who are able to reduce rates of premature asset impairment.

7.2. People and Capacity Development

Opportunity # 6: Focus on Employee Recruitment and Retention

A particular issue within the Government of Nauru is that many employees are in post for less than a year, subsequently moving on to other posts within the Government. For improved asset management and investment planning, experienced staff are needed. This requires job stability, personnel development, and succession planning.

The government is continually reviewing provision of pension plans, competitive salary, and performance bonuses to encourage the best staff to stay within the public sector.

Opportunity # 7: Capacity Development and Training

There is a need to implement a wide-ranging program of capacity development for Government staff, particularly focusing on project needs identification, business case development and project appraisal, and sector planning. Given the high turnover of staff, it is important that strengthened systems are in place and are robustly implemented. To ensure consistency of approach, it is important that all staff are trained in best practice in these areas.

It is also important to ensure that all Government advisors and consultants, whether funded by Government of Nauru or development partners, have specific capacity building and technology transfer requirements in their terms of reference. Providing long-term support and capacity building will ensure that staff are given wider exposure to best practice and different techniques, to strengthen overall capabilities.

Having a larger pool of staff trained in these areas will reduce the pressure on a small number of individuals, and may improve staff retention, as a lower premium will exist for those staff that are trained.

Appendices

Appendix A: NIISP Participation and Engagement

[CLICK HERE to download Appendix A \(Excel Spreadsheet\)](#)

Appendix B: Public Sector Asset Register Summary Report

[CLICK HERE to download Appendix B \(PDF\)](#)

Appendix C: Asset Register and Condition Assessment

[CLICK HERE to download Appendix C \(Excel Spreadsheet\)](#)

Appendix D: Asset Management Organizational Strengthening

[CLICK HERE to download Appendix D \(PDF\)](#)

Appendix E: Multi-Criteria Assessment (MCA) Forms

[CLICK HERE to download Appendix E \(ZIP file\)](#)

Appendix F: Project Long and Short List

[CLICK HERE to download Appendix F \(Excel spreadsheet\)](#)



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