



Federated States of Micronesia INFRASTRUCTURE DEVELOPMENT PLAN FY2016-FY2025

Volume 3:

Chuuk State Infrastructure Development Plan FY2016-FY2025



This Federated States of Micronesia Infrastructure Development Plan FY2016-FY2025 comprises the following parts:

Introduction

Volume 1 Plan Outline

Annexes

Volume 2 National Infrastructure Development Plan

Volume 3 Chuuk State Infrastructure Development Plan

Volume 4 Kosrae State Infrastructure Development Plan

Volume 5 Pohnpei State Infrastructure Development Plan

Volume 6 Yap State Infrastructure Development Plan

The following Federated States of Micronesia Infrastructure Development Plan FY2016-FY2025 documents are available:

Federated States of Micronesia Infrastructure Development Plan FY2016-FY2025 (all parts)

FSM Infrastructure Development Plan FY2016-FY2025 Outline (Introduction, Volume 1 & Annexes)

National Infrastructure Development Plan FY2016-FY2025 (Volume 2)

Chuuk State Infrastructure Development Plan FY2016-FY2025 (Volume 3)

Kosrae State Infrastructure Development Plan FY2016-FY2025 (Volume 4)

Pohnpei State Infrastructure Development Plan FY2016-FY2025 (Volume 5)

Yap State Infrastructure Development Plan FY2016-FY2025 (Volume 6)

FSM Infrastructure Development Plan FY2016-FY2025 Summary (abbreviated outline and listings of projects)

Volume 3 Chuuk State Infrastructure Development Plan

Foreword by the Governor

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Part 1 Introduction

This Volume 3 of the IDP is known as the **Chuuk State Infrastructure Development Plan FY2016 to FY2025** (the Chuuk IDP).

1.1 Overview

Chuuk is located (830nm) to the west of Yap state, with Pohnpei (1208nm) and Kosrae (1500nm) to the east. It is the most populated state of FSM. Chuuk State consists of several island groups with a combined population of 48,615 (FSM Census, 2010). The 2010 Census reported fewer residents in the state compared to 2000 (-1.0 percent decline) as a result of substantial net-migration to neighboring US Territories, Hawaii and US Mainland. This was associated with the recent mixed economic fortunes of the state. The state's per capita income was \$1,455 in 2013, compared with the FSM average of \$2,300. This was the lowest in the country. According to the 2010 Census unemployment in the state was 24.6 percent, about fifty-percent higher than the FSM 16.2 percent average.

Chuuk state covers an area of 121.5 sq. km (46.9 sq. miles). The island groups within the state are: Chuuk Lagoon (islands within the lagoon: North and South Namoneas, Faichuk), Mortlocks, Hall Islands and Northwest. The islands located within the lagoon are surrounded by 225 km of barrier reef. They are mountainous and constitute the main economic and population centers (75 percent of the total state population or 36,493). The outer islands of Chuuk state (Mortlocks, Hall Islands and Northwest (Namounuito atoll and Pattiw)) are sparsely populated atolls, with a combined population of 14,005. Administratively Chuuk is divided into 40 municipalities, 16 of which are located within the Chuuk lagoon.

1.2 Climate and the Challenges of Change

The Joint State Action Plan for Chuuk, dealing with climate change and the development of infrastructure to adapt to climate change, will be developed in the upcoming period in conjunction with the supporting agency SPC. It is likely to follow a similar pattern to those for Kosrae, and particularly of Yap, as the challenges and issues are similar. Current projects included in the IDP will contribute to climate change mitigation and adaptation, in particular by:

- Improved access and reduced fuel use from the upgraded road system
- Improvement of the Uman Pedestrian Road
- Increased use of renewable energy

1.3 Plan Development

The Chuuk IDP presents the State's priority infrastructure investments for the next 10 years identified by the Chuuk IPIC and government and community stakeholders. The projects have been prioritized according to three periods; Period 1, FY2016 to FY2019 (during which the Amended Compact arrears are intended to be fully appropriated), Period 2, FY2020 to FY2022, and Period 3, FY2023 to FY2025.

The IPIC-led group assessed the contribution of each priority project to the IDP strategic objectives (Volume 1, section 2.2.2) to provide a Strategic Rating out of 10. Although strategic ratings are not comparable between projects and sectors due to variations in the scope of projects and inherent sector factors (and cannot be used to prioritize projects), the rating process has nonetheless confirmed that the priority projects each make a strong contribution to relevant strategic objectives.

The development process provided valuable input into the management and implementation arrangements (section 2.2) and with the sector managers provided information for the priority projects outlines incorporated into the Chuuk IDP (Part 4).

Part 2 Plan Outline

2.1 Investment Strategy

2.1.1 Available Funding

Details of the funding available from FSM's development partners and the National Government can be found in Volume 1, Part 3 of the IDP.

Chuuk receives Amended Compact funds according to the formula set by the FSM Congress (currently 42.22 percent). The underpinning nature of infrastructure warrants a more even distribution of infrastructure funding so funds associated with bilateral donors, multilateral banks and climate change are not allocated on a formula-basis. An amount equal to 25 percent of these funds is included in the Chuuk IDP, however Chuuk may receive a greater or lesser amount on a program or project basis.

The funding available to Chuuk State is 40 percent of total available IDP infrastructure funding. Table C 1 shows the allocation over the 10 years of the IDP; \$257.7 million for development and \$40.7 million for maintenance.

Table C 1 – Total Available Chuuk IDP Funding

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025
Chuuk										
Development	58,457,941	30,102,020	28,781,040	28,769,999	19,691,358	20,250,196	20,231,473	20,210,189	15,546,276	15,632,257
Maintenance	4,659,363	4,658,739	5,138,047	5,136,885	3,670,950	3,669,249	3,667,278	3,665,038	3,174,100	3,183,150
TOTAL	63,117,303	34,760,760	33,919,087	33,906,883	23,362,308	23,919,445	23,898,751	23,875,227	18,720,376	18,815,407

2.1.2 Priority Projects

The Chuuk IDP includes priority projects estimated at \$283.7 million across 8 of the 10 infrastructure sectors. The breakdown of project estimates by sector is shown in Figure C 1 and the listing of priority projects is included in Table C 2.

Figure C 1 – Chuuk IDP Breakdown by Sector

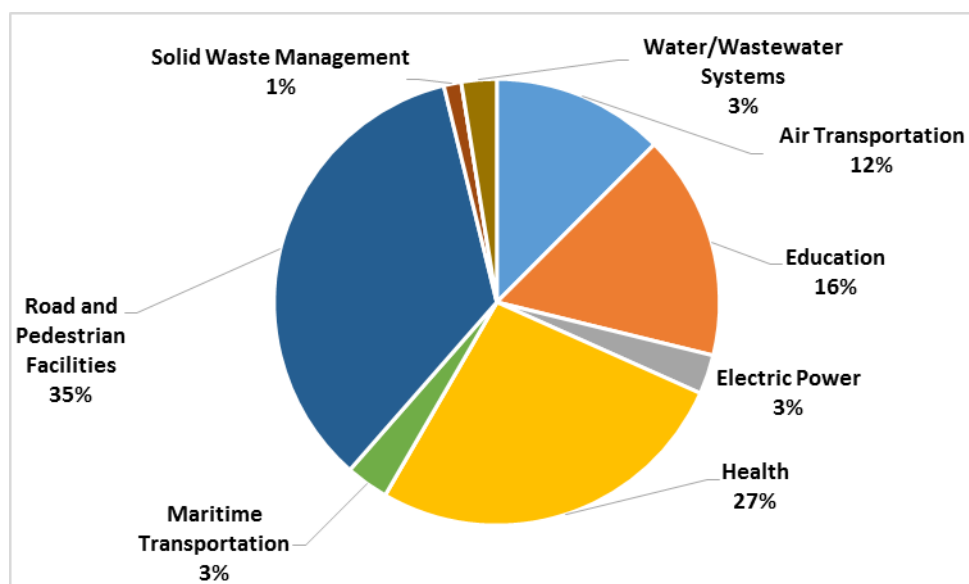


Table C 2 – Chuuk IDP Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
PM/1	Chuuk Project Management Office	10,000,000	All	n/a
EP/1	Weno Electric Power Distribution Improvements	800,000	1	9.6
EP/2	Tonoas Electric Power Distribution Improvements	1,000,000	1	9.6
EP/3	Renewable Energy Expansion - Phase 1	4,000,000	1	9.8
EP/4	Renewable Energy Expansion - Phase 2	2,000,000	½	9.8
WW/1	Weno Water Supply Improvements	7,000,000	1	9.6
SW/1	Weno Solid Waste Management Facility	3,500,000	1	9.3
RD/1	Weno Road & Services Improvement Project - Phase 1	2,000,000	1	9.6
RD/2	Weno Road & Services Improvement Project - Phase 2	42,504,000	½	9.6
RD/3	Faichuk Road Improvements	24,750,000	2	9.6
RD/4	Tonoas Road Improvements	8,250,000	2	9.3
RD/5	Fefen Road Improvements	11,550,000	2	9.3
RD/6	Uman Pedestrian Road Improvements	4,400,000	2	8.9
RD/7	Establish Asphalt Plant and Core Equipment	1,500,000	1	7.8
MT/1	Chuuk Lagoon Dock Facilities	6,625,000	2	9.3
MT/2	Weno Commercial Port Improvements	1,375,000	1	9.8
MT/3	Chuuk State Multi-Role Vessel	500,000	2	9.3
AT/1	Chuuk Runway, Taxiway and Apron Rehabilitation	30,000,000	1	7.3
AT/2	Ta Airstrip Improvements	800,000	1	6.4
AT/3	Onoun/Ulul Airstrip Improvements	2,345,000	1	6.4
AT/4	Houk Airstrip Improvements	1,055,000	1	6.4
ED/1	Chuuk Lagoon Elementary & High Schools - Phase 1	5,852,000	1	9.8
ED/2	Northwest Elementary & High Schools - Phase 1	6,454,000	1	9.8
ED/3	Mortlocks Elementary & High Schools - Phase 1	240,000	1	9.8
ED/4	Chuuk Schools Land Definition and Acquisition	3,000,000	1	9.8
ED/5	Chuuk Lagoon Elementary & High Schools - Phase 2	19,976,000	2	9.8
ED/6	Northwest Elementary & High Schools - Phase 2	2,364,000	2	9.8
ED/7	Mortlocks Elementary & High Schools - Phase 2	6,848,000	2	9.8
HE/1	Chuuk State Hospital - Renovate Existing Facilities	5,800,000	1	9.3
HE/2	Chuuk State Hospital - New Facility	40,000,000	1/2	9.3
HE/3	Chuuk Lagoon Dispensaries - Phase 1	1,600,000	1	8.4
HE/4	Chuuk Lagoon Dispensaries - Phase 2	4,000,000	1	8.4
HE/5	Chuuk Lagoon Dispensaries - Phase 3	9,600,000	2	8.4
HE/6	Outer Island Dispensaries - Phase 1	4,800,000	1	8.4

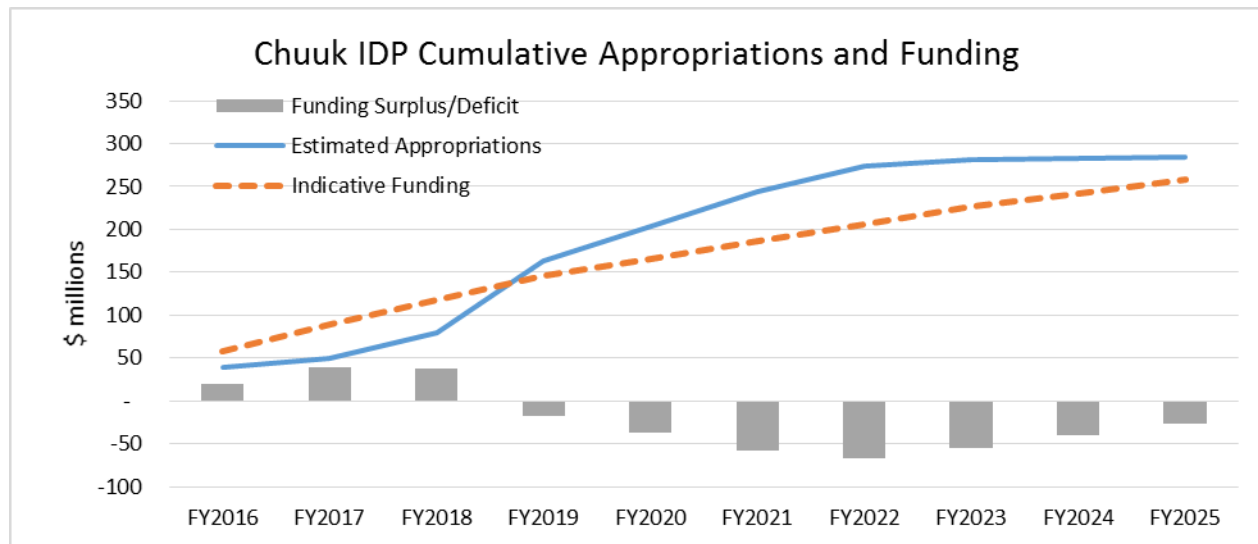
ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
HE/7	Outer Island Dispensaries - Phase 2	6,720,000	2	8.4
HE/8	Chuuk Health Facilities Land Definition and Acquisition	500,000	1	8.4
Total Development Funding Required		283,708,000		
MTCE	Infrastructure Maintenance	40,620,000		

2.1.3 Project Funding Requirements

Based on the project priorities identified during development of the Chuuk IDP, a funding appropriation profile covering the 10 year period has been estimated. In summary, as shown in Figure C 2, the Chuuk IDP priority projects exceed available funding by about 10 percent.

As a result of the March 2012 JEMCO decision the gap in Amended Compact funding leads to a period of low demand for funds with planning and design the dominant activities. Appropriations for construction will be significant by FY2019. From this point on appropriations exceed funding identified in the IDP. This implies additional funding needs to be identified and/or priorities reassessed. The planned review of the Chuuk IDP in FY2019 will provide the opportunity to undertake this reassessment.

Figure C 2 – Chuuk IDP Available Funding and Estimated Appropriations



2.1.4 Infrastructure Maintenance

Chuuk State has a total of \$40.62 million of maintenance funding available from FY2016 to FY2025. This includes \$7.49 million required to match the available Amended Compact IMF funding.

2.2 Management and Implementation

2.2.1 State Governance

An effective State IPIC will provide the basis for strong governance of infrastructure delivery at the State program and project level once the coordinated control processes have been established.

Most importantly the intended upgraded role of the IPIC and establishment of the implementation framework outlined below will devolve the planning and implementation responsibilities to the States without compromising control, integrity and governance.

2.2.2 Implementation model

National program management

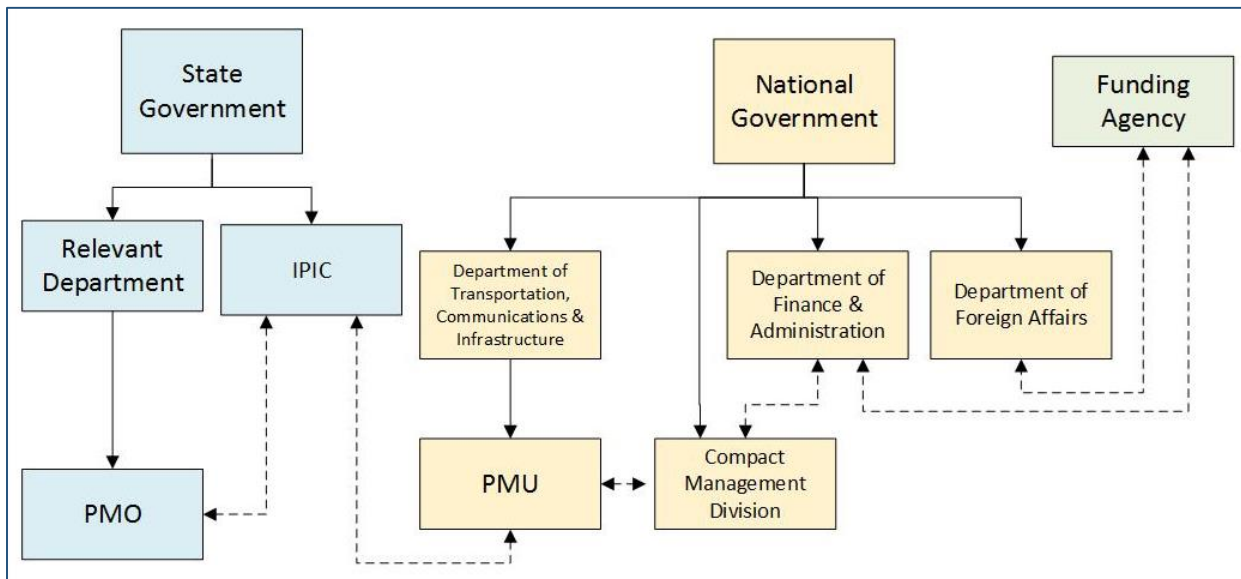
The implementation model retains the PMU within DTCI but restructures the unit to focus on **Program Management**. The PMU will provide ongoing support to the State to ensure standards are developed and shared, subsequent design and construction contracts are consistent with appropriate risk management and will provide peer review expertise as required.

State delivery accountabilities

The State will be accountable for **Project Management**, from initial planning, through design to construction completion. The State will form a Project Management Office (PMO). The PMO will undertake all the project management activities from initial design through to construction and completion.

The general structure of the implementation model is shown on Figure C 3.

Figure C 3 – Organization Chart of Infrastructure Delivery



The PMO will initially contract with the private sector (external party) to ensure project delivery capability is in place by Q3 2016. The contracted external party will be used across all four States within FSM to provide consistency of project management approaches, processes and methodologies.

State Project Management Offices

The State PMO will have the following resources:

- Project Manager(s)
- Contracting Officer(s)
- Resident Engineers and Inspectors.
- Technical Specialists as required

General Considerations

The cost of the PMO is estimated to be between 5 and 7 percent of the State infrastructure development program which is within international benchmarks and internationally recognized as a legitimate program cost.

The IDP includes provision for the required funds for the PMO as part of the Amended Compact component of the State's infrastructure development program (noting that Amended Compact PMO funding is dedicated to the delivery of Amended Compact projects).

The external party providing the PMO services will be excluded from participating in any further contract for the design, construction or supervision on an IDP project for which it has project management responsibilities to ensure probity is maintained.

The external party will be contractually bound to build local project management capacity in the State and will have its capacity building plans and performance regularly reviewed by IPIC.

The roles and responsibilities for each party involved in planning, implementation and management of the IDP's Amended Compact component are documented in Annex A of the IDP.

2.2.3 Process enhancements

All infrastructure projects require defined project management processes from scope definition through funds release, design and construction to successful completion. Best practice processes incorporate key steps, hold points, client reviews and concise and complete documentation to support such processes.

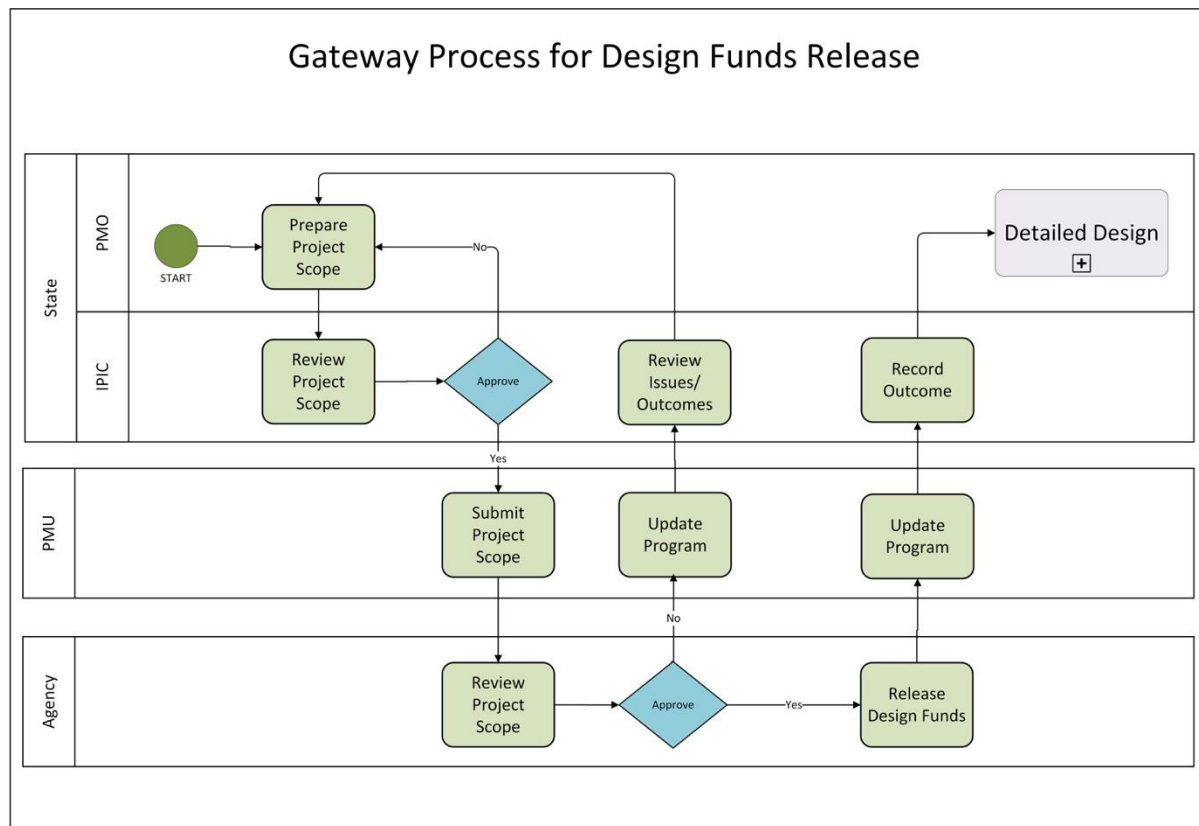
It is also good practice to release funds at two stages; initially to release funds to enable the full project design to be undertaken and then, prior to the construction procurement process commencing, the funding required for construction. This approach facilitates the orderly progress of the project while ensuring that after design there is a review of the project scope, time and cost and any changes are formally signed off before committing funds for construction.

Pre-Design and initial funds release

The PMO will fully document the project scope and formally agree this information with the IPIC.

The project will be submitted for the release of initial (generally design) funds once endorsed by the IPIC. For Amended Compact funded projects this submission is to the PMU and then onward to OIA. Figure C 4 shows the process for this stage as an example of the processes that will be operated by the PMO and other bodies.

Figure C 4 – Example Process Diagram



Once the initial funds have been appropriated, the PMO will conduct (if required) a competitive procurement process in accordance with the prevailing procurement process and regulations to identify and contract the design consultant.

Design and construction funds release

The PMO will formally review each project with the IPIC twice during design. The PMO will also hold regular client meetings with sector representatives.

The IPIC reviews will be held when the design is 30 percent complete and when it is 100 percent complete (but still subject to review). The 30 percent design review will ensure that designs remain on an agreed path before significant design costs are incurred.

Following a design being accepted as complete a second submission will be made to the funding agency for the appropriation of construction funds. For Amended Compact funded projects this submission is to the PMU and then onward to the OIA.

Construction procurement

Once construction funds have been appropriated, the PMO will conduct a competitive procurement process in accordance with the prevailing procurement process and regulations to identify and contract the construction contractor (and any required supervision consultant).

Variations

The PMO will process variations generally as follows:

- variations in scope require IPIC approval to ensure project outcomes remain fully agreed
- variations in scope or cost that require additional funding will be endorsed by IPIC before submission to Government and/or OIA (as required) for approval

- change orders to a contract will be processed in accordance with the PMU's planned contract management manual

Completion

The PMO will prepare a Project Completion Report for endorsement by the IPIC. This report will include analysis of the project on a time, cost and quality basis. PMU will prepare summary KPIs to compare performance for the four State PMOs and identify areas for improvement.

2.3 Institutional Projects

The IDP (Volume 1, section 6.4) contains a number of institutional projects that will have an impact on Chuuk State infrastructure.

The most important is the project to reestablish Chuuk's land title register through a combination of:

- recovering land title information held in Hawai'i and Guam
- surveying and establishing land title boundaries in consultation with stakeholders
- producing new land title records that are legally sufficient
- resolving any legislative aspects

Other institutional projects involve the development of:

- asset management policy, strategy and capacity in all States
- a FSM Building Code
- maritime and aviation safety and security capacity

2.4 Public Land Ownership

Successful implementation of the Chuuk IDP education and health sector programs depends on establishing public ownership over school and dispensary land. Clear title over land is a prerequisite for the release of construction grants.

Both sectors include projects to address land ownership in a programmatic and systematic manner, rather than on a school by school, dispensary by dispensary basis. The projects provide funding for land acquisition and the costs associated with survey, negotiation and title processing.

The education and health sector programs have two phases; the first involving schools and dispensaries on public land and the second involving those on private land. This allows a reasonable timeframe to secure public ownership prior to commencing phase 2. Particularly where schools and dispensaries are closely located, coordination across both programs is essential.

Part 3 Infrastructure Development

3.1 Past Infrastructure Development

The estimated Chuuk State infrastructure development funding in the period FY2004 to FY2015 is shown in Table C 3 against the funding planned in the IDP 2004 over its whole 20 year period.

Table C 3 – Planned and Estimated Infrastructure Development Funding

Sector	IDP 2004 Total Funds FY2004-FY2025 (\$)	Estimated Development Funding FY2004-FY2015 (\$)¹		
		Amended Compact Grants	Estimated Other Funding	Estimated Total Funding
Electric Power	58,765,000	9,206,000	8,550,000	17,756,000
Water/Wastewater Systems	65,491,000	14,463,000	4,000,000	18,463,000
Solid Waste Management	10,000,000			
Roads and Pedestrian Facilities	49,798,000	39,744,000		39,744,000
Maritime Transportation	32,307,000			
Air Transportation	19,451,000	497,000	27,971,000	28,468,000
Telecommunications				
Education	46,853,000	750,000		750,000
Health	7,480,000	333,000		333,000
Government Administrative Buildings	9,000,000		10,000,000	10,000,000
Total \$:	299,145,000	64,993,000	50,521,000	115,514,000

Notes: 1. Estimated funding does not include maintenance and some project management and design costs

3.2 Sector Outlines and Priority Projects

3.2.1 Electric Power

Electric power is provided by Chuuk Public Utilities Corporation (CPUC) with its mandate to generate sufficient revenue to cover O&M costs.

CPUC's commercial operations are currently restricted to Weno with plans to expand to Tonoas. When the private generating facility is operational in Tonoas and the electric power network has been improved (Project No. EP/2), CPUC will purchase the power and be responsible for distribution customers and O&M of the network. Outside of these areas CPUC undertakes O&M for electric power facilities through service agreements principally with Chuuk's Education and Health Departments.

A high percentage of Weno customers have a metered supply and O&M costs are largely covered from tariff revenue. Improvements to and/or rehabilitation of generation and distribution assets and major network extensions, as well as the installation and integration of renewable energy sources into the grid and interim management resources, are dependent on external financing.

Chuuk has a program to increase the proportion of electric power sourced from renewable sources as well as undertaking energy efficiency programs at a number of levels, all of which will contribute to a declining reliance on imported fuel oils for electric power generation.

The electric power projects in the Chuuk IDP are listed in Table C 4 and support the sector goal to develop electric power infrastructure to ensure that all areas of the country are provided with electric power in an efficient and effective manner in accordance with demand such that:

1. households are provided with power for basic livelihood purposes
2. local manpower can realize production opportunities and potential
3. power is available for basic services such as schools, hospitals, water and wastewater systems
4. national targets for renewable energy are achieved

The priority projects are also aligned with the major 2020 targets in the National Energy Policy for renewable energy sources to be at least 30 percent of total energy production and for a 50 percent increase in electric power efficiency.

Further information on each project can be found in the Project Outlines in Part 4.

Table C 4 – Electric Power Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
EP/1	Weno Electric Power Distribution Improvements	800,000	1	9.6
EP/2	Tonoas Electric Power Distribution Improvements	1,000,000	1	9.6
EP/3	Renewable Energy Expansion - Phase 1	4,000,000	1	9.8
EP/4	Renewable Energy Expansion - Phase 2	2,000,000	1/2	9.8
Total Funding Required		7,800,000		

3.2.2 Water/Wastewater Systems

Water and wastewater systems are also the responsibility of CPUC with its mandate is to deliver water and wastewater utility services on a self-funding basis.

Similar to electric power, commercial operations are centered on Weno where there is broad metering of water supply and effective O&M of water and wastewater systems.

The water/wastewater project in the Chuuk IDP listed in Table C 5 supports elements of the sector goal to provide water and wastewater infrastructure that:

1. meets the demand for water supply and wastewater infrastructure in an effective and efficient manner
2. improves existing water abstraction, treatment and distribution systems
3. evaluates and institutes technologically appropriate liquid waste management systems
4. improves and initiates wastewater facilities to increase coverage and contribute towards improvements in public health and environmental conditions
5. contributes towards the prevention of water borne diseases through the provision of potable water supplies

Further information on each project can be found in the Project Outline in Part 4.

Table C 5 – Water/Wastewater System Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
WW/1	Weno Water Supply Improvements	7,000,000	1	9.6
Total Funding Required		7,000,000		

3.2.3 Solid Waste Management

Solid waste management at the central landfill site is managed by the Department of Transportation and Public Works in conjunction with the Environmental Protection Agency.

The current site is close to capacity and a replacement site is urgently needed. The new site has been scoped and had an environmental impact assessment prepared. The landfill will use the Fukuoka Method common across the Pacific as an appropriate and cost-effective method for disposal and processing of solid waste. The site will include facilities for the separation and storage of recyclable and hazardous wastes.

The solid waste management project in the Chuuk IDP listed in Table C 6 supports the sector goal to provide solid waste management infrastructure that:

1. meets the demand for solid waste infrastructure in an effective and efficient manner
2. evaluates and institutes technologically appropriate solid waste management systems
3. reduces volume of solid waste for disposal by maximizing recycling and separation opportunities thereby minimizing the land area required
4. prevents solid waste having adverse effects on the terrestrial and marine environments

Further information on the project can be found in the Project Outline in Part 4.

Table C 6 – Solid Waste Management Priority Project

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
SW/1	Weno Solid Waste Management Facility	3,500,000	1	9.3
Total Funding Required		3,500,000		

3.2.4 Roads and Pedestrian Facilities

Road infrastructure in Chuuk is the responsibility of the Department of Transportation and Public Works.

The most extensive road network is on Weno but, other than the current length under construction, it is in poor to very poor condition and needs full rehabilitation or reconstruction. There are basic roads on the Southern Namoneas and Faichuk islands and these will be reconstructed to sealed road standard to improve accessibility and connectivity. A pedestrian road will be developed on Uman.

The road and pedestrian facilities projects in the Chuuk IDP listed in Table C 7 support the sector goal to provide road and pedestrian facilities infrastructure that:

1. enables transportation facilities to be adequate in terms of condition, capacity, reliability and safety to enable market opportunities to be realized for all areas of the country, including labor market opportunities, and to enhance the level of integration of state economies and the national economy
2. meets the demand for road and pedestrian infrastructure in an effective and efficient manner, including concrete/asphalt paving of all primary road systems

3. incorporates pedestrian walkways in the design and construction of roads
4. extends cross-island and inner roads to facilitate agricultural and other development
5. is resilient to the impacts of climate change

A key component of the priority program is the establishment of an asphalt plant with asphalt laying equipment to support the extensive road development program and later maintenance activities to improve the sustainability of road infrastructure.

Further information on each project can be found in the Project Outline in Part 4.

Table C 7 – Road and Pedestrian Facilities Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
RD/1	Weno Road & Services Improvement Project - Phase 1	2,000,000	1	9.6
RD/2	Weno Road & Services Improvement Project - Phase 2	42,504,000	1/2	9.6
RD/3	Faichuk Road Improvements	24,750,000	2	9.6
RD/4	Tonoas Road Improvements	8,250,000	2	9.3
RD/5	Fefen Road Improvements	11,550,000	2	9.3
RD/6	Uman Pedestrian Road Improvements	4,400,000	2	8.9
RD/7	Establish Asphalt Plant and Core Equipment	1,500,000	1	7.8
Total Funding Required		94,954,000		

3.2.5 Maritime Transportation

Chuuk's maritime transportation infrastructure is managed by the Department of Transportation and Public Works. The State port on Weno is utilized by both international shipping and local boats typically transferring passengers and goods to and from the islands in the Chuuk lagoon.

The projects in the Chuuk IDP focus on improving the movements within Chuuk lagoon by establishing new and upgraded dock facilities in the Southern Namoneas and Faichuk groups as well as the facilities available for international shipping and cargo. A multi-role vessel will also be provided to support government services and programs, including the shipment of equipment and materials for Chuuk IDP projects within Chuuk lagoon and on the outer islands, and provide a key disaster response and recovery resource.

The maritime transportation projects in the Chuuk IDP are listed in Table C 8 and support the sector goal to provide maritime transportation infrastructure that:

1. enables market opportunities to be realized for all areas of the country, including labor market opportunities, and to enhance the level of integration of state economies and the national economy
2. provides improved dock facilities to meet both fisheries and commercial shipping needs
3. facilitates modern, safe and efficient inter-state and inter-island passenger and cargo vessels
4. coordinates and facilitates the improvement of aids to navigation

Further information on each project can be found in the Project Outlines in Part 4.

Table C 8 – Maritime Transportation Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
MT/1	Chuuk Lagoon Dock Facilities	6,625,000	2	9.3
MT/2	Weno Commercial Port Improvements	1,375,000	1	9.8
MT/3	Chuuk State Multi-Role Vessel	500,000	2	9.3
Total Funding Required		8,500,000		

3.2.6 Air Transportation

Chuuk International Airport is managed by the Department of Transportation and Public Works. The rehabilitation works at the airport are part of the FAA's Airport Improvement Program and included Airport Master Plan²⁷. Previous FAA grants have funded other airport improvements, particularly the aircraft rescue and firefighting facility and equipment.

Improvements to the outer island airstrips are part of the overall program jointly prepared by DTPI the Department of Transportation and Public Works and include extensions to make the airstrips capable of operating prospective inter-island aircraft. The amount included for the Ta airstrip is for the balance of improvement works with funding of \$600,000 having been appropriated in FY2015 by the National Government. The other airstrip improvement projects in the Chuuk IDP represent the full cost of the required works.

The air transportation projects in the Chuuk IDP are listed in Table C 9 and support the sector goal to provide air transportation infrastructure that:

1. provides adequate air transportation facilities and services in terms of condition, frequency, capacity, reliability and safety to enable market opportunities to be realized for all areas of the country
2. enables air carrier airports to improve safety and eliminate payload restrictions
3. improves all domestic airports to the required standards of safety

Further information on each project can be found in the Project Outlines in Part 4.

Table C 9 – Air Transportation Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
AT/1	Chuuk Runway, Taxiway and Apron Rehabilitation	30,000,000	1	7.3
AT/2	Ta Airstrip Improvements	800,000	1	6.4
AT/3	Onoun/ULul Airstrip Improvements	2,345,000	1	6.4
AT/4	Houk Airstrip Improvements	1,055,000	1	6.4
Total Funding Required		34,200,000		

3.2.7 Education

The Department of Education is responsible for Chuuk's public education infrastructure, excluding the College of Micronesia. The priority projects in the Chuuk IDP have been selected based on the Chuuk

²⁷ (Leo A Daly, 2012c) - Chuuk International Airport Final Master Plan

State School Facility Repair and Construction Master Plan²⁸, and include implementation of consolidation recommendations in the Master Plan. The schools in each of the Chuuk IDP education projects is on the basis of whether the schools are located:

1. on public land (phase 1 schools) or private land (phase 2 schools, and
2. in the Chuuk lagoon, Northwest or Mortlocks region

A separate project for the definition and acquisition of private land for schools (ED/4) will facilitate a systematic and coordinated approach to land-related activities.

The education projects in the Chuuk IDP are listed in Table C 10 and support the sector goal to provide education infrastructure that:

1. ensures that the learning experience is enhanced and diversified
2. improves student and faculty interest and morale, and thereby improves the effectiveness of education and significantly increases the student retention rates through graduation from elementary or secondary schools
3. removes constraints on the availability of high school education for all graduates of elementary school, and to provide an array of post-secondary education opportunities for all high school graduates who seek further education
4. continues to assist and strengthen private educational institutions to the nation
5. is supported by facilities improvement programs that address the need for maintenance, renovation and construction of new facilities to support quality student instruction
6. is supported by equipment maintenance guidelines
7. is resilient to potential natural disasters and the impacts of climate change

Further information on each project can be found in the Project Outlines in Part 4.

Table C 10 – Education Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
ED/1	Chuuk Lagoon Elementary & High Schools - Phase 1	5,852,000	1	9.8
ED/2	Northwest Elementary & High Schools - Phase 1	6,454,000	1	9.8
ED/3	Mortlocks Elementary & High Schools - Phase 1	240,000	1	9.8
ED/4	Chuuk Schools Land Definition and Acquisition	3,000,000	1	9.8
ED/5	Chuuk Lagoon Elementary & High Schools - Phase 2	19,976,000	2	9.8
ED/6	Northwest Elementary & High Schools - Phase 2	2,364,000	2	9.8
ED/7	Mortlocks Elementary & High Schools - Phase 2	6,848,000	2	9.8
Total Funding Required		44,734,000		

3.2.8 Health

The Department of Health's principal resource, the Chuuk State Hospital will be redeveloped in line with the Needs Assessment Study²⁹ and most of the State dispensaries will be either renovated or redeveloped.

The dispensary projects, other than those in project HE/3 follow a similar approach to the Chuuk schools with phasing based on the regional location of the dispensaries and whether they are located on public

²⁸ (Aloterre Consulting, 2012c) - Chuuk State School Facility Repair and Construction Master Plan

²⁹ (Stanley Consultants, 2013) - Needs Assessment Study, Chuuk State Hospital

or private land. A land definition and acquisition project is also included for the dispensary program and in practice it will be managed jointly with the counterpart schools project.

The health projects in the Chuuk IDP are listed in Table C 11 and support the sector goal to provide health infrastructure that:

1. provides modern and efficient hospital facilities to meet the health needs of the nation
2. facilitates an upgraded the curative health system to minimize the needs for referrals to foreign medical facilities
3. provides health care facilities within reasonable access of all citizens
4. has facilities improvement programs that address the need for maintenance, renovation and construction of new facilities
5. has adequate funds for maintenance to prevent rapid deterioration of facilities
6. is resilient to potential natural disasters and the impacts of climate change

Further information on each project can be found in the Project Outlines in Part 4.

Table C 11 – Health Priority Projects

ID	Project Title	Required Funding (\$)	Target Period	Strategic Rating
HE/1	Chuuk State Hospital - Renovate Existing Facilities	5,800,000	1	9.3
HE/2	Chuuk State Hospital - New Facility	40,000,000	1/2	9.3
HE/3	Chuuk Lagoon Dispensaries - Phase 1	1,600,000	1	8.4
HE/4	Chuuk Lagoon Dispensaries - Phase 2	4,000,000	1	8.4
HE/5	Chuuk Lagoon Dispensaries - Phase 3	9,600,000	2	8.4
HE/6	Outer Island Dispensaries - Phase 1	4,800,000	1	8.4
HE/7	Outer Island Dispensaries - Phase 2	6,720,000	2	8.4
HE/8	Chuuk Health Facilities Land Definition and Acquisition	500,000	1	8.4
Total Funding Required		73,020,000		

3.3 Whole of Life Costs

The costs associated with new infrastructure do not end with purchase or construction. It is one step in the life cycle of an asset that begins with the initial identification of needs through to the disposal of the asset at the end of its useful life. When all these costs are combined, the total may be more than double the cost of the initial purchase/construction price.

The provision of adequate funding for preventative maintenance as part of a whole of life approach to asset management is a key institutional issue for FSM, like other Pacific Island countries.

Estimates of the Chuuk IDP priority project maintenance costs by sector over a 20 year period are included in Table C 12. Although some assets have a life other than 20 years, this period has been chosen to provide an indication of the maintenance funding required on an annual basis.

The annual percentage maintenance cost and the asset life factors can be found in Table 14 in Volume 1, Part 6, section 6.2 of the IDP.

Table C 12 – Chuuk IDP 20 Year Maintenance Costs

Sector	20 Year Costs (\$)		B / A	Annual Maintenance Cost (\$)
	Construction (A)	Maintenance (B)		
Electric Power	7,429,000	4,286,000	58%	214,000
Water/Wastewater Systems	6,667,000	2,667,000	40%	133,000
Solid Waste Management	3,333,000	1,333,000	40%	67,000
Road and Pedestrian Facilities	86,458,000	65,471,000	76%	3,274,000
Maritime Transportation	8,119,000	6,571,000	81%	329,000
Air Transportation	32,571,000	78,171,000	240%	3,909,000
Education	38,643,000	19,321,000	50%	966,000
Health	65,927,000	52,742,000	80%	2,637,000
Total	249,147,000	230,562,000	93%	11,528,000

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4.1 Electric Power Projects

Project C 1 – Weno Electric Power Distribution Improvements (EP/1)

Project Title:		Weno Electric Power Distribution Improvements					Sector:	Electric Power		
Project Description/Scope:		Improve the reliability and security of electric power distribution by extending the network by around 20,000’ to provide additional network connectivity and fault tolerance								
Agencies Responsible:		Chuuk Public Utilities Corporation								
Project Objectives/ Outcomes:		Provide more reliable and secure electric power supply to consumers								
Project Justification:		Parts of the distribution network are susceptible to limited points of failure								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	4	4	5	5	9.6	
Project Status:		Concept								
Inclusions:		Additional distribution poles and lines								
Exclusions:		To be assessed as part of scope definition								
Risks & Dependencies:		To be assessed as part of scope definition								
Estimated Planning & Design Costs \$:		Included in construction costs			Estimated Construction Costs \$:		800,000			

Project C 2 – Tonoas Electric Power Distribution Improvements (EP/2)

Project Title:		Tonoas Electric Power Distribution Improvements				Sector:	Electric Power			
Project Description/Scope:		Improve the network on Tonoas to distribute electric power generated by Petrocorp’s copra facility to consumers on the island								
Agencies Responsible:		Chuuk Public Utilities Corporation								
Project Objectives/Outcomes:		Provide the benefits of electric power generated by Petrocorp to the Tonoas community								
Project Justification:		Petrocorp facility will generate sufficient electric power to supply Tonoas community if the distribution network can be improved								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	4	4	5	5	9.6	
Project Status:		Concept								
Inclusions:		Rehabilitation of the electric power distribution network, metering of consumers								
Exclusions:		Generation of electric power, distribution to other Southern Namoneas islands								
Risks & Dependencies:		Petrocorp facility is not developed or prove to be sustainable; to be assessed as part of scope definition								
Estimated Planning & Design Costs \$:		included in construction costs			Estimated Construction Costs \$:		1,000,000			

Project C 3 – Renewable Energy Expansion - Phase 1 (EP/3)

Project Title:		Renewable Energy Expansion - Phase 1					Sector:	Electric Power		
Project Description/Scope:		Increase the contribution of renewable energy to Chuuk’s electric power needs by developing 1 MW of solar power								
Agencies Responsible:		Chuuk Public Utilities Corporation								
Project Objectives/ Outcomes:		Reduce Chuuk’s reliance on imported fuel for electric power generation								
Project Justification:		Cost reduction and climate change mitigation								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	5	4	5	5	9.8	
Project Status:		Concept								
Inclusions:		To be assessed as part of scope definition								
Exclusions:		To be assessed as part of scope definition								
Risks & Dependencies:		To be assessed as part of scope definition; suitable sites for locating renewable energy installations;								
Estimated Planning & Design Costs \$:		200,000			Estimated Construction Costs \$:		3,800,000			

Project C 4 – Renewable Energy Expansion - Phase 2 (EP/4)

Project Title:		Renewable Energy Expansion - Phase 2					Sector:	Electric Power	
Project Description/Scope:		Increase the contribution of renewable energy to Chuuk’s electric power needs							
Agencies Responsible:		Chuuk Public Utilities Corporation							
Project Objectives/ Outcomes:		Reduce Chuuk’s reliance on imported fuel for electric power generation							
Project Justification:		Cost reduction and climate change mitigation							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	5	4	5	5	9.8
Project Status:		Concept							
Inclusions:		To be assessed as part of scope definition							
Exclusions:		To be assessed as part of scope definition							
Risks & Dependencies:		To be assessed as part of scope definition; suitable sites for locating renewable energy installations							
Estimated Planning & Design Costs \$:		100,000			Estimated Construction Costs \$:		1,900,000		

4.2 Water/Wastewater System Projects

Project C 5 – Weno Water Supply Improvements (WW/1)

Project Title:		Weno Water Supply Improvements					Sector:	Water/Wastewater Systems		
Project Description/Scope:		Improve the reliability, quality and security of Weno’s water supply by: <ul style="list-style-type: none">• Renovating the 2 million gallon storage tanks• Replacing distribution pipes with high loss rates• Extending the distribution system to north and south ends• Metering all outstanding properties connected to the distribution system• Rehabilitating the water catchment storage to reduce reliance on groundwater								
Agencies Responsible:		Chuuk Public Utilities Corporation								
Project Objectives/ Outcomes:		Provide Weno with reliable, safe, secure and financially viable water supply								
Project Justification:		Poor condition of some water storages and section of the distribution system and reliance on ground water impact on the reliability, quality and security of Weno’s water supply Some consumers remain un-metered, impacting on CPUC’s financial and operational performance								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	4	5	4	5	5	9.6	
Project Status:		Scoped								
Inclusions:		To be developed in the design stage								
Exclusions:		To be developed in the design stage								
Risks & Dependencies:		To be developed in the design stage; availability of land for government use								
Estimated Planning & Design Costs \$:		350,000			Estimated Construction Costs \$:	6,650,000				

4.3 Solid Waste Management Projects

Project C 6 – Weno Solid Waste Management Facility (SW/1)

Project Title:		Weno Solid Waste Management Facility					Sector:	Solid Waste Management		
Project Description/Scope:		Develop a new solid waste management center to replace the current site that is close to capacity								
Agencies Responsible:		Department of Public Works & Transportation / EPA								
Project Objectives/ Outcomes:		Establish a long term solid waste management center to replace the current center, compliant with relevant standards and regulations and minimizing the solid waste going to landfill								
Project Justification:		The current solid waste management center is close to capacity and a long term replacement facility is required in the short term								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	4	5	3	5	5	9.3	
Project Status:		Concept – preferred site on private land has been identified								
Inclusions:		Solid waste management center that is compliant with all environmental regulations & standards and minimizes the amount of solid waste going to landfill								
Exclusions:		To be assessed as part of scope definition								
Risks & Dependencies:		To be assessed as part of scope definition, replacement site is not able to be set aside for the solid waste management center								
Estimated Planning & Design Costs \$:		500,000			Estimated Construction Costs \$:		3,000,000			

4.4 Road and Pedestrian Facilities Projects

Project C 7 – Weno Road & Services Improvement Project - Phase 1 (RD/1)

Project Title:		Weno Road & Services Improvement Project - Phase 1					Sector:	Road and Pedestrian Facilities		
Project Description/Scope:		Complete the final change orders for construction of Weno Roads Phase 1								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Complete Weno roads Phase 1 inclusive of all required works								
Project Justification:		Final completion depends on the completion of some final change orders								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	4	5	5	4	9.6	
Project Status:		In progress								
Inclusions:		As per change orders								
Exclusions:		To be managed during implementation								
Risks & Dependencies:		To be managed during implementation								
Estimated Planning & Design Costs \$:		Design funded pre FY2016			Estimated Construction Costs \$:		2,000,000 (all but final Change Orders funded pre FY2016)			

Project C 8 – Weno Road & Services Improvement Project - Phase 2 (RD/2)

Project Title:		Weno Road & Services Improvement Project - Phase 2					Sector:	Road and Pedestrian Facilities		
Project Description/Scope:		Complete the improvement of the Weno circumferential road from adjacent to the airport runway at Iras in the north to the end of Weno Roads Phase 1 at the Mormon Church in the south, including the currently inaccessible section of approximately 1.7 miles. Phase 2 works will: <ul style="list-style-type: none">• Comprise a total of 38.64 miles of generally 22 foot asphalt surfaced carriageway with open side drains as required• Include related water supply and sewer improvements (similar to Phase 1)								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Provide a two-lane sealed road around the full circumference of Weno with related improvements in water supply and sewer systems								
Project Justification:		Existing circumferential road is not continuous (1.7 mile gap) and existing condition is generally poor and very poor over significant lengths								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	4	5	5	4	9.6	
Project Status:		Concept								
Inclusions:		To be assessed as part of scope definition								
Exclusions:		Sidewalks and connector roads, clearing of the formation on the currently inaccessible section, land acquisition								
Risks & Dependencies:		To be assessed as part of scope definition ; land required for the road is not in public ownership								
Estimated Planning & Design Costs \$:		3,860,000			Estimated Construction Costs \$:		10,820,000 (water & sewer systems) 27, 824,000 (road construction)			

Project C 9 – Faichuk Road Improvements (RD/3)

Project Title:		Faichuk Road Improvements					Sector:	Road and Pedestrian Facilities	
Project Description/Scope:		Improve road conditions on Faichuk islands by upgrading 30 miles of roads to sealed road standard (generally 22 foot asphalt surfaced carriageway with open side drains as required)							
Agencies Responsible:		Department of Public Works & Transportation							
Project Objectives/ Outcomes:		Provide a two-lane sealed road for the major Faichuk island roads							
Project Justification:		Existing Faichuk roads are unsealed and in poor condition							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	4	9.6
Project Status:		Concept							
Inclusions:		To be assessed as part of scope definition							
Exclusions:		Utility services, land acquisition							
Risks & Dependencies:		To be assessed as part of scope definition							
Estimated Planning & Design Costs \$:		2,250,000			Estimated Construction Costs \$:		22,500,000		

Project C 10 – Tonoas Road Improvements (RD/4)

Project Title:		Tonoas Road Improvements					Sector:	Road and Pedestrian Facilities		
Project Description/Scope:		Improve road conditions on Tonoas by upgrading 10 miles of roads to sealed road standard (generally 22 foot asphalt surfaced carriageway with open side drains as required)								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Provide a two-lane sealed road for the major Tonoas roads								
Project Justification:		Existing Tonoas roads are largely unsealed and in poor condition								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	3	5	5	4	9.3	
Project Status:		Concept								
Inclusions:		To be assessed as part of scope definition								
Exclusions:		Utility services, land acquisition								
Risks & Dependencies:		To be assessed as part of scope definition								
Estimated Planning & Design Costs \$:		750,000			Estimated Construction Costs \$:		7,500,000			

Project C 11 – Fefen Road Improvements (RD/5)

Project Title:		Fefen Road Improvements					Sector:	Road and Pedestrian Facilities		
Project Description/Scope:		Improve road conditions on Fefen by upgrading 14 miles of roads to sealed road standard (generally 22 foot asphalt surfaced carriageway with open side drains as required)								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/Outcomes:		Provide a two-lane sealed road for the major Fefen roads								
Project Justification:		Existing Fefen roads are largely unsealed and in poor condition								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	3	5	5	4	9.3	
Project Status:		Concept								
Inclusions:		To be assessed as part of scope definition								
Exclusions:		Utility services, land acquisition								
Risks & Dependencies:		To be assessed as part of scope definition								
Estimated Planning & Design Costs \$:		1,050,000			Estimated Construction Costs \$:		10,500,000			

Project C 12 – Uman Pedestrian Road Improvements (RD/6)

Project Title:		Uman Pedestrian Road Improvements					Sector:	Road and Pedestrian Facilities		
Project Description/Scope:		Improve road conditions on Uman for pedestrians and two-wheeled transport by upgrading 10 miles of road to sealed single-lane road standard (generally 10 foot asphalt surfaced carriageway with open side drains as required), also providing access for visiting 4 wheeled vehicles								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Provide a single-lane sealed road for the major Uman roads								
Project Justification:		Existing Uman roads are unsealed and in poor condition								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
3	4	5	5	5	4	5	5	4	8.9	
Project Status:		Concept								
Inclusions:		To be assessed as part of scope definition								
Exclusions:		Utility services, land acquisition								
Risks & Dependencies:		To be assessed as part of scope definition								
Estimated Planning & Design Costs \$:		400,000			Estimated Construction Costs \$:		4,000,000			

Project C 13 – Establish Asphalt Plant and Core Equipment (RD/7)

Project Title:		Establish Asphalt Plant and Core Equipment					Sector:	Road and Pedestrian Facilities		
Project Description/Scope:		Establish an asphalt plant appropriate to Chuuk’s road development and maintenance needs								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Establish a core capability to produce and lay asphalt for road development projects, avoiding the need for contractors to import asphalt plant and equipment or each project, and undertaking road maintenance as and when required								
Project Justification:		Chuuk’s road development projects will otherwise require contractors to import asphalt plant and equipment on a project-by-project basis, and there will be a need to produce asphalt for ongoing maintenance								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	3	3	2	2	5	5	7.8	
Project Status:		Concept								
Inclusions:		Establishment of asphalt plant and asphalt laying equipment, including a stock of spares and consumables, training of local staff and design of standard asphalt mixes appropriate to Chuuk’s needs and locally available materials								
Exclusions:		To be assessed as part of scope definition								
Risks & Dependencies:		To be assessed as part of scope definition; sustainability of local capacity to operate asphalt plant and equipment								
Estimated Planning & Design Costs \$:		Included in construction costs			Estimated Construction Costs \$:		1,500,000			

4.5 Maritime Transportation Projects

Project C 14 – Chuuk Lagoon Dock Facilities (MT/1)

Project Title:		Chuuk Lagoon Dock Facilities				Sector:	Maritime Transportation		
Project Description/Scope:		Improve the transportation of people and goods within the Chuuk Lagoon by: <ul style="list-style-type: none">• Tolensom Docks, Winifrei & Wonip• Oneisom Dock, Sapitiw• Romonum Dock, Chorong• Eot Dock, Fanip• Ichimantong Dock – Tonoas<ul style="list-style-type: none">• Dock Repair - Apron Repair• Lighting (Solar powered)• Fefen Dock Improvement at Sapeta• Uman Dock at Sopou or Aranga• Parem Dock• Siis Dock							
Agencies Responsible:		Department of Public Works & Transportation							
Project Objectives/ Outcomes:		Provide greater opportunities for movement of goods and people for commercial, social and tourism related activities to improve local trade, access to education and health.							
Project Justification:		Existing transport facilities are limited							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	3	9.3
Project Status:		Concept							
Inclusions:		To be assessed as part of scope definition							
Exclusions:		To be assessed as part of scope definition							
Risks & Dependencies:		To be assessed as part of scope definition							
Estimated Planning & Design Costs \$:		660,000			Estimated Construction Costs \$:	5,965,,000			

Project C 15 – Weno Commercial Port Improvements (MT/2)

Project Title:	Weno Commercial Port Improvements						Sector:	Maritime Transportation	
Project Description/Scope:	Improve the operation of Chuuk’s commercial port on Weno by improving: <ul style="list-style-type: none">the cargo warehousethe cargo movement and operation areathe quaysidenavigational aidsapron lighting, including conversion to solar power								
Agencies Responsible:	Department of Public Works & Transportation								
Project Objectives/Outcomes:	Improve the operational safety, security and efficiency of the commercial port								
Project Justification:	Conditions and facilities at the commercial port impact on its safety, security and efficiency								
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	5	9.8
Project Status:	Concept								
Inclusions:	To be assessed as part of scope definition								
Exclusions:	To be assessed as part of scope definition								
Risks & Dependencies:	To be assessed as part of scope definition								
Estimated Planning & Design Costs \$:	140,000				Estimated Construction Costs \$:	1,235,000			

Project C 16 – Chuuk State Multi-Role Vessel (MT/3)

Project Title:		Chuuk State Multi-Role Vessel					Sector:	Maritime Transportation		
Project Description/Scope:		Provide a suitable vessel that is able to undertake a number of roles including: <ul style="list-style-type: none">• Transporting commercial passengers and goods to, from and between the lagoon and outer islands• Transporting equipment and machinery to the lagoon and outer islands in support of government and community development and maintenance projects and disaster recovery• Providing “first response” in the event of a natural disaster or other event impacting on community health or safety• Providing reliable and accessible transport for government agencies to deliver improved services to the lagoon and outer islands								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Reduce the issues associated with communities living on small and widely spread islands and lacking in safe, reliable external transportation								
Project Justification:		Needs of communities and government are not being met by currently available maritime transportation options								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	4	5	5	3	9.3	
Project Status:		Concept								
Inclusions:		To be assessed as part of scope definition								
Exclusions:		To be assessed as part of scope definition								
Risks & Dependencies:		To be assessed as part of scope definition; State cannot meet the operational costs of the vessel								
Estimated Planning & Design Costs \$:		included in construction costs			Estimated Construction Costs \$:		500,000			

4.6 Air Transportation Projects

Project C 17 – Chuuk Runway, Taxiway and Apron Rehabilitation (AT/1)

Project Title:		Chuuk Runway, Taxiway and Apron Rehabilitation					Sector:	Air Transportation		
Project Description/Scope:		Rehabilitate the runway, taxiway and apron surfacing and improve other airport infrastructure and facilities as identified by FAA								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Provide improved runway, taxiway and apron surfaces and other airport facilities and infrastructure								
Project Justification:		Need for improved surfacing and other airport facilities and infrastructure identified by FAA								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
3	5	3	5	5	1	3	4	4	7.3	
Project Status:		In procurement								
Inclusions:		To be managed during implementation								
Exclusions:		To be managed during implementation								
Risks & Dependencies:		Interruption to airline services								
Estimated Planning & Design Costs \$:		included in construction costs				Estimated Construction Costs \$:	27,000,000 (FAA AIP Grant) 3,000,000 (FSM matching funds)			

Project C 18 – Ta Airstrip Improvements (AT/2)

Project Title:	Ta Airstrip Improvements					Sector:	Air Transportation		
Project Description/Scope:	Extend the airstrip to 3,000' (currently 1,360') and provide perimeter fencing to improve safety and security								
Agencies Responsible:	Department of Public Works & Transportation								
Project Objectives/ Outcomes:	Provide an airstrip capable of operating prospective inter-island aircraft and improve the airstrip safety and security								
Project Justification:	Airstrip has inadequate length to service prospective inter-island aircraft and lack of perimeter fencing is a safety and security concern								
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
3	4	3	5	5	2	2	3	2	6.4
Project Status:		Scoped							
Inclusions:		Extension of airstrip to 3,000' and perimeter fencing							
Exclusions:		To be developed in the design stage							
Risks & Dependencies:		To be developed in the design stage							
Estimated Planning & Design Costs \$:		Included in construction cost			Estimated Construction Costs \$:		800,000		

Project C 19 – Onoun/Ulul Airstrip Improvements (AT/3)

Project Title:		Onoun/Ulul Airstrip Improvements					Sector:	Air Transportation		
Project Description/Scope:		Extend the airstrip to 3,000' (currently 1,200') and resurface the current airstrip								
Agencies Responsible:		Department of Public Works & Transportation								
Project Objectives/ Outcomes:		Provide an airstrip capable of operating prospective inter-island aircraft and improve the condition of the current airstrip surface								
Project Justification:		Airstrip has inadequate length to service prospective inter-island aircraft surface condition is an operational and safety concern								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
3	4	3	5	5	2	2	3	2	6.4	
Project Status:		Scoped								
Inclusions:		Extension of airstrip to 3,000' and resurfacing of existing airstrip								
Exclusions:		To be developed in the design stage								
Risks & Dependencies:		To be developed in the design stage								
Estimated Planning & Design Costs \$:		235,000			Estimated Construction Costs \$:		2,115,000			

Project C 20 – Houk Airstrip Improvements (AT/4)

Project Title:		Houk Airstrip Improvements					Sector:	Air Transportation	
Project Description/Scope:		Extend the airstrip to 3,000' (currently 1,200') and resurface the current airstrip							
Agencies Responsible:		Department of Public Works & Transportation							
Project Objectives/Outcomes:		Provide an airstrip capable of operating prospective inter-island aircraft and improve the condition of the current airstrip surface							
Project Justification:		Airstrip has inadequate length to service prospective inter-island aircraft surface condition is an operational and safety concern							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
3	4	3	5	5	2	2	3	2	6.4
Project Status:		Scoped							
Inclusions:		Extension of airstrip to 3,000' and resurfacing of existing airstrip							
Exclusions:		To be developed in the design stage							
Risks & Dependencies:		To be developed in the design stage							
Estimated Planning & Design Costs \$:		100,000			Estimated Construction Costs \$:		955,000		

4.7 Education Projects

Project C 21 – Chuuk Lagoon Elementary & High Schools - Phase 1 (ED/1)

Project Title:	Chuuk Lagoon Elementary & High Schools - Phase 1					Sector:	Education		
Project Description/Scope:	Implement the Chuuk High School Master Plan for Phase 1 Chuuk Lagoon Elementary & High Schools, including:								
	MP Ref	School	Total Cost		Renov'n	Constr'n	Add'l Constr'n		
	Chuuk Lagoon Schools - Phase 1 (Public Land) - (5 Elementary Schools and 2 High Schools)								
	1	Romanum Elementary School	876,000		✓				
	2	Eot Elementary School	559,000			✓			
	7	Foup Elementary School	1,208,000		✓				
	9	Mechitiw Elementary School	304,000			✓			
	20	Pwene Elementary School	812,000		✓	✓		✓	
	5	Southern Namoneas High School – Fefen	1,518,000			✓			
	6	Chuuk High School	575,000			✓			
		5,852,000							
Agencies Responsible:	Department of Education								
Project Objectives/ Outcomes:	Provide improved teaching and learning facilities and environment that facilitates improved education outcomes								
Project Justification:	As detailed in Chuuk Schools Master Plan								
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	5	9.8
Project Status:	Scoped: Master Plan & Detailed Engineering Assessments								
Inclusions:	Fencing and other school facilities								
Exclusions:	To be developed in the design stage								
Risks & Dependencies:	To be developed in the design stage								
Estimated Planning & Design Costs \$:	328,000				Estimated Construction Costs \$:	5,524,000			

Project C 22 – Northwest Elementary & High Schools - Phase 1 (ED/2)

Project Title:		Northwest Elementary & High Schools - Phase 1					Sector:	Education	
Project Description/Scope:	Implement the Chuuk High School Master Plan for Phase 1 Northwest Elementary & High Schools, including:								
	MP Ref	School			Total Cost	Renov'n	Constr'n	Add'l Constr'n	
	Northwest Schools - Phase 1 (Public Land) - (10 Elementary Schools and 1 High School)								
	3	Tamatam Elementary School			449,000	✓	✓		
	4	Murilo Elementary School			188,000	✓			
	5	Pollap Elementary School			302,000	✓			
	6	Ruo Elementary School			189,000	✓			
	14	Houk Elementary School			225,000	✓			
	15	Onou Elementary School			343,000		✓		
	16	Polowat Elementary School			486,000		✓		
	17	Nomwin Elementary School			230,000	✓			
	18	Makur Elementary School			98,000	✓			
	19	Unanu Elementary School			358,000	✓	✓		
	1	Weipat High School			3,586,000	✓	✓		✓
				6,454,000					
Agencies Responsible:		Department of Education							
Project Objectives/ Outcomes:		Provide improved teaching and learning facilities and environment that facilitates improved education outcomes							
Project Justification:		As detailed in Chuuk Schools Master Plan							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	5	9.8
Project Status:		Scoped: Master Plan & Detailed Engineering Assessments							
Inclusions:		Fencing and other school facilities							
Exclusions:		To be developed in the design stage							
Risks & Dependencies:		To be developed in the design stage							
Estimated Planning & Design Costs \$:		365,000			Estimated Construction Costs \$:		6,089,000		

Project C 23 – Mortlocks Elementary & High Schools - Phase 1 (ED/3)

Project Title:		Mortlocks Elementary & High Schools - Phase 1				Sector:		Education	
Project Description/Scope:		Implement the Chuuk High School Master Plan for Phase 1 Mortlocks Elementary & High Schools, including:							
		MP Ref	School		Total Cost		Renov'n	Constr'n	Add'l Constr'n
		Mortlocks Schools - Phase 1 (Public Land) - (1 Elementary School)							
		11	Ettal Elementary School		240,000		✓		
					240,000				
Agencies Responsible:		Department of Education							
Project Objectives/ Outcomes:		Provide improved teaching and learning facilities and environment that facilitates improved education outcomes							
Project Justification:		As detailed in Chuuk Schools Master Plan							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	5	9.8
Project Status:		Scoped: Master Plan & Detailed Engineering Assessments							
Inclusions:		Fencing and other school facilities							
Exclusions:		To be developed in the design stage							
Risks & Dependencies:		To be developed in the design stage							
Estimated Planning & Design Costs \$:		included in construction costs			Estimated Construction Costs \$:		240,000		

Project C 24 – Chuuk Schools Land Definition and Acquisition (ED/4)

Project Title:		Chuuk Schools Land Definition and Acquisition					Sector:	Education	
Project Description/Scope:		Fully define the land requirements for all schools and acquire all private land							
Agencies Responsible:		Division of Commerce and Industry							
Project Objectives/ Outcomes:		Ensure that all school facilities are located on public land							
Project Justification:		50 Elementary Schools and 3 High Schools currently occupy private or disputed land							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	5	9.8
Project Status:		Concept: Land requirements for most schools identified							
Inclusions:		Surveying of land for school use, negotiation and purchase of land and registration of titles							
Exclusions:		To be developed in the design stage							
Risks & Dependencies:		To be developed in the design stage; private land owners will not agree to sell land or will not accept market valuations							
Estimated Planning & Design Costs \$:		3,000,000			Estimated Construction Costs \$:		0		

Project C 25 – Chuuk Lagoon Elementary & High Schools - Phase 2 (ED/5)

Project Title:		Chuuk Lagoon Elementary & High Schools - Phase 2				Sector:	Education			
Project Description/Scope:		Implement the Chuuk High School Master Plan for Phase 2 Chuuk Lagoon Elementary & High Schools, including:								
		MP Ref	School		Total Cost excl. Land	Renov'n	Constr'n	Add'l Constr'n	Land Acqu'n	
		Chuuk Lagoon Schools - Phase 2 (Private Land) - (37 Elementary Schools and 2 High Schools)								
		13	Sapore Elementary School		1,323,000			✓	✓	
		21	Neauo Annex (Wichap)		537,000		✓		✓	
		22	Sapou Elementary School		340,000	✓			✓	
		23	Etten Annex		345,000	✓	✓		✓	
		24	Tonokas Annex		235,000	✓	✓		✓	
		25	Neauo Elementary School		449,000		✓		✓	
		26	Sapota Elementary School (Faichuk)		1,039,000		✓		✓	
		27	Udot Annex		270,000		✓		✓	
		28	Piis Paneu Elementary School		563,000	✓	✓		✓	
		30	Sapota Elementary School (SN)		365,000	✓			✓	
		31	Nukuno Elementary School		1,301,000		✓		✓	
		32	Parem Elementary School		348,000	✓			✓	
		35	Fason Elementary School		798,000		✓		✓	
		40	Kuchu Elementary School		726,000	✓	✓		✓	
		41	Siis Elementary School		293,000		✓		✓	
		42	P&P Elementary School		242,000	✓			✓	
		43	Faro Elementary School		340,000	✓			✓	
		44	Neirenomw Elementary School		691,000		✓		✓	
		45	Munien Elementary School		279,000	✓			✓	
		46	Fanapanges Elementary School		443,000	✓	✓		✓	
		49	Amwachang Elementary School		1,323,000		✓		✓	
		50	Wichukuno Elementary School		542,000		✓		✓	
		51	Chukuram Elementary School		438,000	✓	✓		✓	
		52	Udot Elementary School		-				✓	
		54	UFO Elementary School		-				✓	
		55	Mwan Elementary School		-				✓	
		56	Sapuk Elementary School		-				✓	
		57	Sino Elementary School		-				✓	
		58	Teruo Bokuku Memorial Elem School		406,000		✓		✓	
		59	Central Wonip Elementary School		-				✓	
		60	Panitiw Elementary School		-				✓	
		61	Nechap Elementary School		-				✓	
		62	Fonoton Elementary School		-				✓	
		63	Epin Elementary School		-				✓	
64	West Fefen Elementary School		-				✓			
65	Manaio Elementary School		-				✓			
66	Iras Elementary School		-				✓			
2	Weno High School		2,528,000	✓	✓	✓	✓			
3	Faichuk High School		3,820,000	✓		✓	✓			
			19,976,000							
Agencies Responsible:		Department of Education								
Project Objectives/ Outcomes:		Provide improved teaching and learning facilities and environment that facilitates improved education outcomes								
Project Justification:		As detailed in Chuuk Schools Master Plan								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
5	5	5	5	5	4	5	5	5	9.8	

Project Status:	Scoped: Master Plan & Detailed Engineering Assessments		
Inclusions:	Fencing and other school facilities		
Exclusions:	Land Acquisition (see Project C 24 (ED/4))		
Risks & Dependencies:	To be developed in the design stage; land acquisition		
Estimated Planning & Design Costs \$:	1,264,000	Estimated Construction Costs \$:	18,712,000

Project C 26 – Northwest Elementary & High Schools - Phase 2 (ED/6)

Project Title:	Northwest Elementary & High Schools - Phase 2					Sector:	Education		
Project Description/Scope:	Implement the Chuuk High School Master Plan for Phase 2 Northwest Elementary & High Schools, including:								
	MP Ref	School			Total Cost excl. Land	Renov'n	Constr'n	Add'l Constr'n	Land Acqu'n
	Northwest Schools - Phase 2 (Private Land) - (3 Elementary Schools)								
	10	Onoun Elementary School			1,501,000	✓	✓	✓	✓
	12	Fananu Elementary School			377,000	✓	✓		✓
	33	Piherarh Elementary School			486,000		✓		✓
					2,364,000				
Agencies Responsible:	Department of Education								
Project Objectives/ Outcomes:	Provide improved teaching and learning facilities and environment that facilitates improved education outcomes								
Project Justification:	As detailed in Chuuk Schools Master Plan								
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	5	9.8
Project Status:	Scoped: Master Plan & Detailed Engineering Assessments								
Inclusions:	Fencing and other school facilities								
Exclusions:	Land Acquisition (see Project C 24 (ED/4))								
Risks & Dependencies:	To be developed in the design stage; land acquisition								
Estimated Planning & Design Costs \$:	165,000				Estimated Construction Costs \$:	2,179,000			

Project C 27 – Mortlocks Elementary & High Schools - Phase 2 (ED/7)

Project Title:	Mortlocks Elementary & High Schools - Phase 2					Sector:	Education		
Project Description/Scope:	Implement the Chuuk High School Master Plan for Phase 2 Mortlocks Elementary & High Schools, including:								
	MP Ref	School			Total Cost excl. Land	Renov'n	Constr'n	Add'l Constr'n	Land Acqu'n
	Mortlocks Schools - Phase 2 (Private Land) - (10 Elementary Schools and 1 High School)								
	8	Ta Elementary School			366,000	✓	✓		✓
	29	Nema Elementary School			277,000	✓			✓
	34	Namoluk Elementary School			318,000	✓			✓
	36	Satowan Elementary School			336,000		✓		✓
	37	Kuttu Elementary School			631,000		✓		✓
	38	Losap Elementary School			530,000		✓		✓
	39	Piisemwar Elementary School			258,000	✓			✓
	47	Lekinioch Elementary School			212,000	✓			✓
	48	Moch Elementary School			39,000	✓			✓
	53	Oneop Elementary School			-				✓
	4	Mortlock High School			3,883,000	✓	✓	✓	✓
				6,848,000					
Agencies Responsible:	Department of Education								
Project Objectives/Outcomes:	Provide improved teaching and learning facilities and environment that facilitates improved education outcomes								
Project Justification:	As detailed in Chuuk Schools Master Plan								
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
5	5	5	5	5	4	5	5	5	9.8
Project Status:	Scoped: Master Plan & Detailed Engineering Assessments								
Inclusions:	Fencing and other school facilities								
Exclusions:	Land Acquisition (see Project C 24 (ED/4))								
Risks & Dependencies:	To be developed in the design stage; land acquisition								
Estimated Planning & Design Costs \$:	437,000				Estimated Construction Costs \$:	6,411,000			

4.8 Health Projects

Project C 28 – Chuuk State Hospital – Renovate Existing Facilities (HE/1)

Project Title:		Chuuk State Hospital – Renovate Existing Facilities					Sector:	Health	
Project Description/Scope:		Renovate the current Chuuk State Hospital facilities to house non-critical functions and services that will not be accommodated in the new hospital facility, including: <ul style="list-style-type: none">Public Health Administration, Dental Clinic and public health related outpatient clinics including HIV/AIDS prevention clinicHospital AdministrationMedical RecordsInformation SystemsMaterials Management and StorageLaboratoryPharmacyDietary Services and Dining AreaMaintenance Areas, including repair shop, garage)Utilities, including water storage, generators, linen, HVACMorgue							
Agencies Responsible:		Department of Health							
Project Objectives/ Outcomes:		Provide improved accommodation for non-critical functions and services required to support and supplement the services and functions provided in the new hospital facility							
Project Justification:		Current hospital buildings are up to 50 years old and cannot effectively support the critical services provided in the new hospital facility							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
4	5	5	5	4	5	4	5	5	9.3
Project Status:		Scoped; In design							
Inclusions:		To be developed in the design stage							
Exclusions:		Critical hospital services and functions, land acquisition							
Risks & Dependencies:		To be developed in the design stage; integration with the program to develop the new hospital							
Estimated Planning & Design Costs \$:		800,000			Estimated Construction Costs \$:		5,000,000		

Project C 29 – Chuuk State Hospital – New Facility (HE/2)

Project Title:		Chuuk State Hospital – New Facility					Sector:		Health	
Project Description/Scope:		Construct a new the Chuuk State Hospital as a 96 bed facility in line with the scope included in Appendix H of the Needs Assessment Study, May 2013, including: <ul style="list-style-type: none">• Nursing units/patients rooms. 96 beds capacity• Medical Nursing Suite – 15 beds• Surgery Nursing Suite – 15 beds• Birthing Suite – 10 beds• Pediatrics Nursing Suite –8 beds• Infectious Diseases Unit – 12 beds• Psychiatric Unit – 4 beds• Skilled Nursing Unit – 32 beds• Emergency Department – 2,034 ft²• Surgical/Delivery Suite – 5,606 ft²• Sterile Process – 1,190 ft²• Diagnostic Imaging – 2,649 ft²• Treatment Areas, Medicine/Surgery Clinics – 3,286 ft²• Treatment Areas, Obstetrics/Gynecology – 966 ft² Note: Support spaces will be shared between: <ul style="list-style-type: none">• Medical Nursing Suite and Surgical Nursing Suite• Pediatrics Nursing Suite and Birthing Suite• Infectious Diseases Unit and Psychiatric Unit								
Agencies Responsible:		Department of Health								
Project Objectives/ Outcomes:		Provide improved critical hospital services and functions								
Project Justification:		Current hospital buildings are up to 50 years old and cannot effectively meet Chuuk’s critical care needs								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
4	5	5	5	4	5	4	5	5	9.3	
Project Status:		Concept (Needs assessment)								
Inclusions:		Critical care facilities								
Exclusions:		Non-critical care facilities to be provided out of renovated sections of the current facility, land acquisition								
Risks & Dependencies:		To be assessed as part of scope definition Renovation of the current facilities to accommodate non-critical functions and services (see Project C 28, HE/1) Integration with the program to renovate the current facilities								
Estimated Planning & Design Costs \$:		3,640,000				Estimated Construction Costs \$:		36,360,000		

Project C 30 – Chuuk Lagoon Dispensaries – Phase 1 (HE/3)

Project Title:		Chuuk Lagoon Dispensaries – Phase 1					Sector:	Health		
Project Description/Scope:		Improve the Phase 1 Chuuk Lagoon dispensaries								
Agencies Responsible:		Department of Health								
Project Objectives/ Outcomes:		Provide improved health services and functions at a community level								
Project Justification:		Basic health services in many communities are impacted by the poor condition the existing dispensaries								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
3	3	5	5	4	3	5	5	5	8.4	
Project Status:		In Procurement								
Inclusions:		To be managed during implementation								
Exclusions:		To be managed during implementation								
Risks & Dependencies:		To be managed during implementation								
Estimated Planning & Design Costs \$:		Design funded pre FY2016			Estimated Construction Costs \$:		1,600,000			

Project C 31 – Chuuk Lagoon Dispensaries – Phase 2 (HE/4)

Project Title:		Chuuk Lagoon Dispensaries – Phase 2					Sector:	Health	
Project Description/Scope:		Improve the dispensaries within Chuuk Lagoon (located on public land) to the standards and facilities incorporated into the Phase 1 dispensaries							
Agencies Responsible:		Department of Health							
Project Objectives/ Outcomes:		Provide improved health services and functions at a community level							
Project Justification:		Basic health services in many communities are impacted by the poor condition the existing dispensaries							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
3	3	5	5	4	3	5	5	5	8.4
Project Status:		Concept							
Inclusions:		To be assessed as part of scope definition							
Exclusions:		To be assessed as part of scope definition							
Risks & Dependencies:		To be assessed as part of scope definition							
Estimated Planning & Design Costs \$:		200,000			Estimated Construction Costs \$:		3,800,000		

Project C 32 – Chuuk Lagoon Dispensaries – Phase 3 (HE/5)

Project Title:		Chuuk Lagoon Dispensaries – Phase 3					Sector:	Health	
Project Description/Scope:		Improve the dispensaries within Chuuk Lagoon located on private land to the standards and facilities incorporated into the Phase 1 dispensaries							
Agencies Responsible:		Department of Health							
Project Objectives/ Outcomes:		Provide improved health services and functions at a community level							
Project Justification:		Basic health services in many communities are impacted by the poor condition the existing dispensaries							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
3	3	5	5	4	3	5	5	5	8.4
Project Status:		Concept							
Inclusions:		To be assessed as part of scope definition							
Exclusions:		To be assessed as part of scope definition; purchase of land (see Project C 35 (HE/8)							
Risks & Dependencies:		Land acquisition							
Estimated Planning & Design Costs \$:		500,000			Estimated Construction Costs \$:		9,100,000		

Project C 33 – Outer Island Dispensaries – Phase 1 (HE/6)

Project Title:		Outer Island Dispensaries – Phase 1					Sector:	Health		
Project Description/Scope:		Improve the dispensaries on the Outer Islands located on public land based on the standards and facilities incorporated into the Chuuk Lagoon Phase 1 dispensaries								
Agencies Responsible:		Department of Health								
Project Objectives/ Outcomes:		Provide improved health services and functions at a community level								
Project Justification:		Basic health services in many communities are impacted by the poor condition the existing dispensaries								
Strategic Alignment										
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)	
3	3	5	5	4	3	5	5	5	8.4	
Project Status:		Concept								
Inclusions:		To be assessed as part of scope definition								
Exclusions:		To be assessed as part of scope definition								
Risks & Dependencies:		To be assessed as part of scope definition								
Estimated Planning & Design Costs \$:		240,000				Estimated Construction Costs \$:	4,560,000			

Project C 34 – Outer Island Dispensaries – Phase 2 (HE/7)

Project Title:		Outer Island Dispensaries – Phase 2					Sector:	Health	
Project Description/Scope:		Improve the dispensaries on the Outer Islands located on private land to the standards and facilities incorporated into the Phase 1 dispensaries							
Agencies Responsible:		Department of Health							
Project Objectives/ Outcomes:		Provide improved health services and functions at a community level							
Project Justification:		Basic health services in many communities are impacted by the poor condition the existing dispensaries							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
3	3	5	5	4	3	5	5	5	8.4
Project Status:		Concept							
Inclusions:		To be assessed as part of scope definition							
Exclusions:		To be assessed as part of scope definition; purchase of land (see Project C 35 (HE/8)							
Risks & Dependencies:		To be assessed as part of scope definition; land acquisition							
Estimated Planning & Design Costs \$:		340,000			Estimated Construction Costs \$:		6,380,000		

Project C 35 – Chuuk Health Facilities Land Definition and Acquisition (HE/8)

Project Title:		Chuuk Health Facilities Land Definition and Acquisition					Sector:	Health	
Project Description/Scope:		Fully define the land requirements for all dispensaries and acquire all private land							
Agencies Responsible:		Division of Commerce and Industry							
Project Objectives/ Outcomes:		Ensure that all dispensaries are located on public land							
Project Justification:		An estimated 38 dispensaries currently occupy private or disputed land							
Strategic Alignment									
Support investment and economic growth	Improve private sector capacity and/or increase employment	Improve living conditions and/or income generation	Improve access to/delivery of public health services	Improve access to/delivery of education	Improve environmental outcomes/ conditions	Improve natural disaster and climate change resilience	Improve capacity of government infrastructure agencies	Improve financial sustainability of infrastructure	Strategic Rating (out of 10)
3	3	5	5	4	3	5	5	5	8.4
Project Status:		Concept: Land requirements for most dispensaries identified							
Inclusions:		Surveying of land for dispensary use, negotiation and purchase of land and registration of titles							
Exclusions:		To be assessed as part of scope definition							
Risks & Dependencies:		To be assessed as part of scope definition ; private land owners will not agree to sell land or will not accept market valuations							
Estimated Planning & Design Costs \$:		500,000			Estimated Construction Costs \$:		0		

