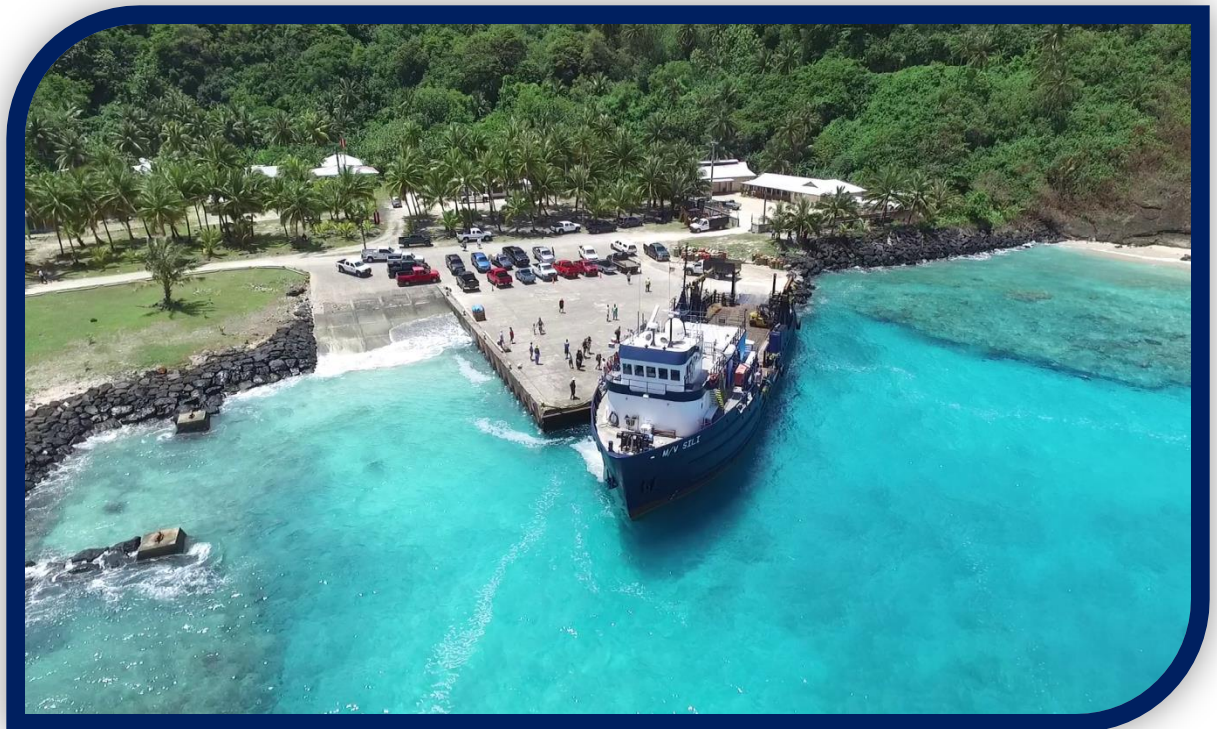


# American Samoa Inter Island Waterways Multi-Purpose Vessel Project Designation



Department of Port Administration  
American Samoa Government  
Main Port Terminal  
P.O Box 1539  
Pago Pago, American Samoa  
96799  
U.S Territory, South Pacific

December 31, 2018

Ms. Lauren Brand, PPM  
Associate Administrator Intermodal Systems Development  
US DOT/Maritime Administration  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Ms. Brand:

The Department of Port Administration (DPA), Port of Pago Pago, American Samoa is pleased to submit the following request for Project Designation that will promote short sea shipping and enhance the overall benefits to the public. The project is designed to have long term sustainability without long term Federal support. The value added outcome will be the expansion of existing transportation services that will increase the frequency of ferry operations, freight and passengers along the designated marine route in American Samoa' inter island waterways.

Harbors and shipping networks are the lifeblood of the Pacific Islands, performing a function similar to the arteries that circulates life sustaining oxygen through the human body. To surmount the geographic isolations of islands, there are only two plausible choices: by air and by sea. However, most commodities cannot be transported by air to the small islands for example, the relatively short runways lengths. Generally speaking, air transport is not economically feasible on more than an emergency basis – hence a major constraint against air freight. Therefore, transportation by sea is the most viable, practical and economical alternative to service the outer islands of American Samoa.

This project calls for replacing an obsolete inter island ferry with a vessel that is better suited operationally, economically, environmentally, and technologically advanced for American Samoa's short sea service needs for passengers and cargo. The residents living on outer islands of American Samoa are 100% reliant on the efficient transportation of people and goods from the main island of Tutuila. As such, the overall efficiency in the movement of cargo and people through our designated marine highway ultimately determines the island's socio-economic health. For the people being served by these marine highways, this is a critical factor in sustaining island life. Additionally, the Project Designation will allow DPA the opportunity to access Federal funding to support short sea shipping activities here in American Samoa.

We respectfully ask for your consideration of our application for a Project Designation and Service Route Enhancement.

Sincerely,

Taimalelagi Dr. Claire Tuia Poumele  
Director

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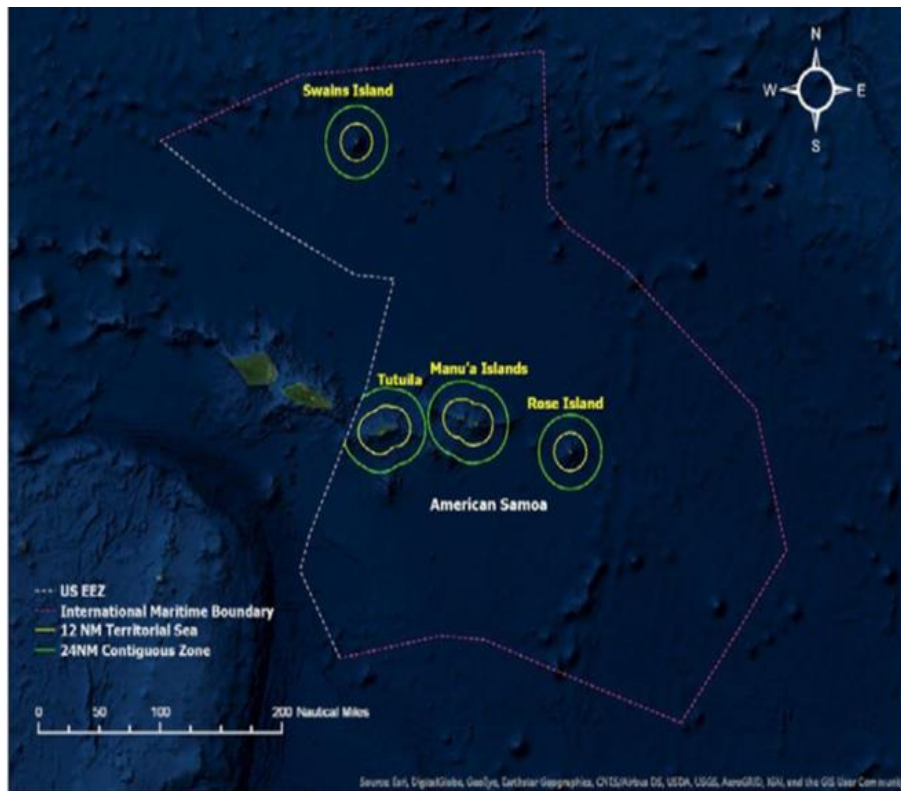
## Designated Project Name: American Samoa Inter Island Waterways Multi-Purpose Vessel

**Applicant:** Port of Pago Pago, Department of Administration, American Samoa Government

**Project Participants:** Department of Port Administration, American Samoa Government  
Departments and Agencies, : Swains Island, Rose Island, Manu'a Districts, Eastern District; Residents of Aunuu , Ofu, Olosega Ta'u Private sector partners include shippers and freight forwarders, retail business owners, utility companies, construction companies, fuelers and contractors who ship their goods and services to the outer islands on a regular basis. Federal partners include those involved in the National Marine Sanctuary, Fish and Wildlife, and NOAA who frequently charter the ferry to inspect and monitor Rose and Swains Islands.

## Marine Highway Routes and Ports Served:

The proposed Marine Highway Route includes the waterways and ocean channels used to transport goods, commodities and services between islands of the Territory of American Samoa, within its Exclusive Economic Zone (EEZ): Tutuila, Aunuu, Ofu, Olosega, Ta'u, Swains and Rose Atoll.



## PORTS SERVED

### PAGO PAGO HARBOR, Tutuila

The main port of entry for American Samoa for all containerized, bulk, break bulk cargo, fueling and tuna processing operations are located here. The marine highway hub and spoke transportation system to the outer island passenger and cargo ferry begins here.



**AUASI SMALL BOAT HARBOR, Tutuila**

Located on the eastern side of Tutuila island, it serves as the most direct route to and from Aunu'u island just off the coast of Tutuila island. This harbor is used daily to transport both cargo and passengers to Aunuu. The entrance channel is 360ft long by 80ft wide, 10ft deep; a 23000sqft by 8ft deep turning basin, with 55ft docking area

**AUNUU SMALL BOAT HARBOR, Aunuu**

Surrounded by reefs stretching out 200+ yards, Aunuu Harbor is the only safe access point to the island. All passenger and cargo is loaded and unloaded here. 7,500sqft; 14 ft deep turning area; a 13500sqft, 8ft deep mooring area, a 70ft wide 175ft long, 14ft deep access channel, with revetments.

**TA'U SMALL BOAT HARBOR, Manu'a**

Located in the Manua Islands, Ta'u harbor is 66 miles east of the main Island of Tutuila. One of two ports on the island of Ta'u, this harbor is used as an alternate harbor for cargo and passenger ferry operations six months out of the year: November through May. 520ft entrance channel; 130ft wide, 16-20ft deep; a turning basin of 85,000sqft, 16ft deep.

**FALEASAO SMALL BOAT HARBOR, Manua**

One of two harbors on the island of Ta'u, Manua this harbor is used in tandem with Ta'u Small Boat Harbor with each being used alternately six months out of the year from April-November. The harbor basin is approximately 2.3 acres. The entrance channel is 13ft deep and 420 ft long. The turning basin is 19ft deep, 200ft by 220ft area

**OFU SMALL BOAT HARBOR, Manua**

Located in the Manua Islands, Ofu Harbor is 60 miles east of Tutuila, and 9 miles northwest from Ta'u Island. As the only port on the island, it serves the islands of Ofu and Olosega. Bi-monthly ferry trips from Pago Pago carry fuel, cargo and passengers to the islands. 993-foot-long revetment; a 220-foot-long entrance channel, 18 feet deep and 130 feet wide; a 2.54-acre turning basin, 16 feet deep; and appurtenant aids to navigation.

**SWAINS ISLAND/Atoll**

Located at the very northern tip of American Samoa's EEZ, Swains Island is frequented on an annual quarterly schedule. 200 mile north of Tutuila island.

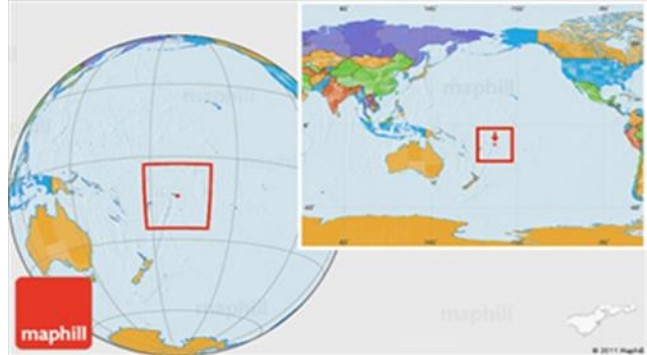
**Rose Atoll – U.S National**

Monument locate about 170 miles east of Tutuila, the principal island of American Samoa. The wildlife refuge is managed by the United States Fish and Wildlife Service, and the wider-ranging monument waters are co-managed by the U.S.



## Executive Summary

AMERICAN SAMOA is a United States Territory located in the Pacific Ocean, south of the equator and sits in the heart of Polynesia. As an island nation, the harbors and shipping network are vital to the Territory's overall socio-economic wellbeing and is in essence the lifeline of American Samoa. The majority of the food consumed, one hundred percent of all fuel that is used to power our vehicles, our fishing fleet and ships, and the generators that provide electricity to our homes and business, are imported through the marine cargo transportation system. All of the Liquid Natural Gas (LNG) to fuel for homes and businesses are imported. The tuna canneries that manufacture the island's major export; along with the cruise ships that bring thousands of tourists per visit, are reliant on the port and marine transportation system to move both goods and people. With six inhabited islands, ocean transportation is the backbone of delivering goods, services and residents to and from the outer islands. As a designated project the Port of Pago Pago will be able to keep up with the varying and growing needs of the Territory as outlined in the 2014-2017 American Samoa Economic Development Implementation Plan.



American Samoa's location and its harbor operations is the ideal location in the South Pacific region as a hub for international trade and regional transshipment. Situated at 14degrees20' south latitude and



172degrees 42' west longitude, it is the only U.S Territory below the equator, and is made up of seven islands: Tutuila, Aunu'u, Ofu, Olosega, Ta'u, Swains and Rose Atoll.

Home to Pago Pago Harbor, with the most natural deep water anchorages in the world, Tutuila is the largest and most populated of the seven islands and is a strategic midpoint for several critical shipping routes between the U.S West Coast, New Zealand, and Australia. American Samoa is 5,000 miles southwest of California; 2,500 miles southwest of Hawaii, and 1600 miles northeast of New Zealand.

As a designated Marine Highway and designated project, the Port of Pago Pago to will enhance both intra-island and inter-island transportation to the outer islands to ultimately promote the development and growth of these relatively isolated areas.

Current Transportation Options for the outer islands include ocean and air transportation. American Samoa communities do not benefit from Federal-aid rail or highway linkages to other ports as a result our

isolation caused by our geographic barriers.

Air travel to the outer islands is very limited with only one flight per day Monday through Fridays only to Ta'u Island; and only once a week on Thursday's to Ofu/Olosega. The aircraft are relatively small and are only able to carry 16 passengers per flight, or less depending on the weight of the cargo. However, most commodities cannot be transported by air to the small islands for example, the relatively short runways lengths, and inflexible safe takeoff and landing weights. Generally speaking, air transport is not economically feasible on more than an emergency basis – hence a major constraint against air freight. Therefore, transportation by sea is the most viable, practical and economical alternative to service the outer islands of American Samoa.

The Commercial Harbor System to the outer islands via the ferry system operates to support shipping of cargo that is containerized, break bulk (household good, construction material, merchandise and in bulk (fuel, petroleum products, liquid natural gas;

The Department of Port Administration is tasked with the mission of effectively managing and operating American Samoa's airport and harbors and maritime transportation system to the outer islands. Pago Pago Harbor acts as distribution hub for all of the outer islands served by small boat harbors: Auasi, Aunuu, Ofu, Ta'u and Faleasao, The route also includes Swains and Rose Islands. With twice monthly scheduled sailings, and charters in between, two ferry vessels handle all of the interisland transportation of people and cargo.

## Background Information

For over 40 years, the government has provided this public service, primarily because there have been no private entities or businesses willing to undertake this task. Currently there are two vessels that are needed to meet short sea cargo services.

- MANUATELE – Built: 2016; HP: 1800hp; Length 140ft; Beam: 38ft; Draft 13ft, 99grt, Cargo Capacity: 165lt; Passenger seating: 125; Cargo Deck: 1,500sqft; Crane: 15ton
- SILI – Built: 1981/Reconditioned: 2004; HP: 1700hp; Length 160ft, Beam: 38ft; Draft: 12ft; Cargo Capacity: 530lt; Passenger Seating: 120; Cargo Deck: 3,100sqft; Crane: 2-10ton cranes.

The ferries operate to the outer islands every two weeks carry all types of cargo including, dry and frozen goods, hazardous materials (ex. fuel, propane, butane and other petroleum products), vehicles and construction materials. Cargo is transported loose, containerized, palletted, and in bulk. In between regular planned trips, charters are scheduled by other local and federal agencies, utility companies, construction companies and families to move goods, materials and people. The vessels operate concurrently and on alternating schedules to accommodate pre-planned maintenance down time and annual USCG inspections and certifications.

For this project proposal, the vessel targeted to be replaced is the SILI. Built in 1981, the vessel was originally designed and used as a supply ship for oil rig platforms in the Gulf of Mexico. DPA purchased it used in 2004, reconditioned it and reconfigured the layout so it can safely be used as a passenger/cargo



inter island ferry vessel. Aging and obsolescence of the MV SILI have been subtle, yet progressive over the years resulting in decreased efficiencies and ultimately poor service. For the past 5 years, the amount of down time for the SILI has increased due the escalating vessel maintenance needed due to the declining condition of the vessel's hull and machinery and the work needed to keep her operational and in compliance with USCG standards and regulations. The overall number of days the SILI has been down for maintenance in 2018 is 163; up from the previous year of 145.



Despite efforts to keep the vessel in service, the reality is that the SILI is well over 30 years old and it has realistically exceeded its operational life. The superstructure, machinery, equipment, navigational aids and auxiliary systems are faced with the problem of obsolescence, leading to extra costs for replacement parts, equipment and services presenting a risk in terms of reliability. In addition, over the past four years, there has been an increase of down time for extensive and critical maintenance. Unfortunately, no trips can be made until the maintenance and repairs are complete. This is the case for

scheduled and unscheduled/emergency repairs.

Up until the arrival of the MANUATELE, the contingency to maintain inter island service has been to charter a suitable vessel (LCU M/V FOTU O SAMOA) from neighboring island Samoa. The average cost of the charter ranges from USD\$25,000 to USD\$30,000 per trip. Often times, it is necessary to have the MV FOTU make two trips to handle all of the cargo. Although a suitable alternative for transporting cargo, the MV FOTU is only capable of seating 12 passengers.

The most cost effective solution to improving service, minimizing down time, increasing efficiencies is to have the SILI replaced. In 2016, the Department of Port Administration was successful in doing just this when it replaced the deteriorating ferry MANUATELE 3 with a new vessel: MANUATELE

Through this program funding, DPA aims promote good service and allow for improved partnering with all stakeholders in the transporting goods and services using the designated marine highway system. Crew and passenger safety, vessel size, design, propulsion and speed, emerging technology, regulatory manning, cargo handling and storage, automation, and passenger seating are just a few of the considerations needed when replacing an obsolete vessel. A newer vessel comes with new cargo handling technologies and equipment; modern navigational aids and equipment to add an additional layer of safety for ship handling; more efficient and environmentally friendly machinery and systems.

The regular movement of people and cargo, however; is interrupted when it is necessary to perform maintenance on the vessel. Unfortunately, no trips can be made until the maintenance and repairs are complete. This is the case for both scheduled and unscheduled/emergency repairs. The end result is that fuel supplies, goods and materials dwindle in the interim; people are unable to travel either to or from Manu'a. The movement of people and cargo to and from Manu'a becomes even more an issue, when there is no air service – which is a frequent occurrence when the aircraft is grounded because of mechanical problems.

By adding another vessel to the fleet, it will add more flexibility to the transportation needs of Manua. It should be noted that anytime hazardous materials are transported, the allowable number of passengers on board is significantly decreased. By having another vessel, cargo and passenger trips can be better scheduled to accommodate both without interruption to either need.

**LONG TERM PLANS:** This project is consistent with the Department of Port Administration’s mission to provide maritime services to the Manu’a Islands, Aunuu, Swains and Rose and ASG’s commitment to economic development. The transportation system to and from Aunuu and Manua is critical to the livelihood of the community.

**PROJECT DURATION** 8-14 months for design, negotiations, new vessel/build

#### VESSEL SPECIFICATIONS

Year Built:	New
Certification:	U.S. Coast Guard Certification Of Inspection (COI); Ocean Going Vessel
Class:	American Bureau Shipping (ABS) load line certified.
Type:	Landing Craft Unit (LCU) – Passenger/cargo ferry
Passenger Capacity:	Comfortable seating for 100 passengers
Length:	140 feet maximum
Beam (Width):	22 - 26 feet
Draft:	7 feet
Hull Type:	Steel, Double-skinned tanks
Engine HP:	Minimum 3,000 horsepower
Propulsion:	Direct Drive; Twin Screw / Bow thruster
Fuel Capacity:	30,000 gallons
Potable Water	450 gallons
Top Speed:	12 - 18 knots
Engine:	Preferably Caterpillar
Auxiliary Equipment:	2 each; 60 kWatts; Caterpillar Generators
Cranes	(2) 10 ton capacity For Lo/Lo ops:
Ramp	Bow Ramp for cargo and Passenger side ramp
Navigation Gear	Radar, Electronic Chart Display, Compass, AIS, Autopilot, Depth Sounder
Communications	Radio: VHF, SSB
Firefighting	On board Fire Suppression system
Cargo Capacity:	80 -150 tons; minimum 10 ton crane capacity
Ramp:	Stern or Bow: for RO/RO ops
Cargo Type:	Loose cargo, palletized, bulk fuel, vehicles and heavy equipment

## (A) Acknowledgement of Minimum Eligibility Requirements for Designation

### 1.1 Documented Vessels

As with the current vessels operating the ferry system, this proposed designated project vessel will be a United States documented vessel meeting all requirements documented under 46 CFR Part 67. Current vessels: MANUATELE (USCG Official No. 1254955); SILI (USCFG Official No. 55389)

## 1.2 Carries Cargo in Short Sea Shipping

This project request involves carrying cargo and passengers loaded from Port of Pago Pago to: Aunuu island 8miles; Ofu: 68miles; Ta'u: 80miles; Faleasao: 78miles, Swains Island: 200miles; Rose Island: 174miles. Any expansion of services will continue to do the same.

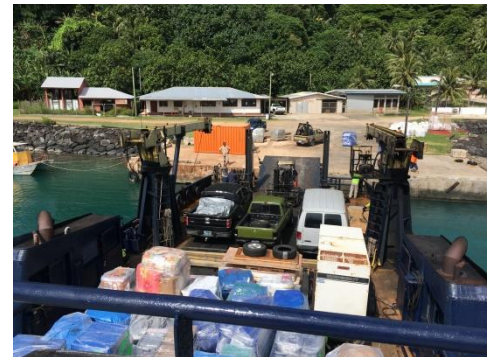
## 1.3 Mitigates Landside Congestion

The service currently supports mitigating congestion to the small boat harbor on the main island of Tutuila.

## 2.1 Short Sea Transportation

The proposed project nets the USDOT definition of; promotes and contributes to Short Sea Transportation; and will continue to do so as part of any future expansion. Eligibility requirements of Short Sea Transportation:

- Transportation of cargo is between port facilities within the U. S Territory of American Samoa via the designated marine highway and inter island waterways;
- Cargo is transported and contained in intermodal cargo containers and loaded by crane onto the vessel;
- Wheeled technology is used to load and offload via the vessel ramps for RO/RO operations;
- Cargo is transported in discrete units and packages that are handled individually, palletized, and unitized for purposes of transportation;
- e) All modes of transportation such as personal, freight, and construction vehicles are carried onboard the ferry boats and transported.



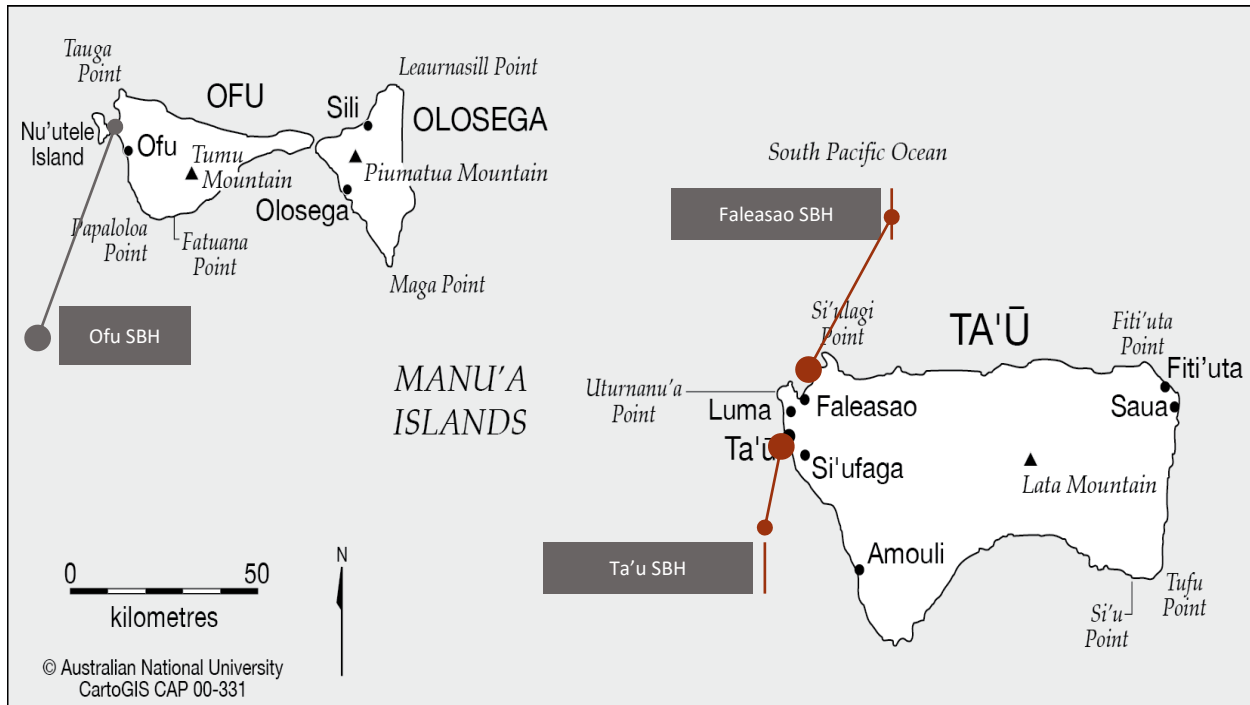
## 2.2 New or Expanded Service

The proposed designated project will provide needed funding to expand the frequency of scheduled trips to the outer islands and will be able to expand charter services of the vessel.

## 2.3 Designated Route



The proposed Project designation is awaiting designation of a Marine Highway Route that includes the waterways and ocean channels used to transport goods, commodities and services between islands of the Territory of American Samoa, within the Exclusive Economic Zone (EEZ): Tutuila, Aunuu, Ofu, Olosega, Ta'u, Swains and Rose Atoll.



As covered in the section (A) above, this designated project proposal complies with the minimum eligibility requirements of: Documented Vessels; Carries Cargo in Short Sea Shipping; Mitigates Landside; Congestion; Promotes Short Sea Transportation; New or Expanded Services; Designated Route.

### 3.0 Route Designation

The project designation request is currently on a Marine High route under review for approval and applicant does not intend to submit any additional route designation

## 4.0 Direct Connection

The proposed project designation directly connects the main of entry, Port of Pago Pago and the small boat harbors of Auasi, Aunuu, Ofu, Ta'u and Faleasao; plus the remote islands of Swain and Rose Atolls

### (B) Timing of Project Designation Submissions

The Port of Pago Pago, Department of Port Administration acknowledges the Timing of the Project Designation submissions and the expected review period by MARAD.

### (C) Project Application Contents

#### 1.0 Market and Customers

##### 1.1 Current Market Service and other Transportation options:

The current inter island cargo and passenger market is being served by the American Samoa Government, managed by the Department of Port Administration. Two ferry vessels: MANUATELE and SILI provide RO/RO and LO/LO options for loading. This proposed project designation calls for replacing the obsolete SILI for a better suited vessel. Other transportation options include air service that is limited to one flight a day. Air lift is limited due to the small runways lengths and limited takeoff and landing weights.

##### 1.2 Identities of Shippers that have indicated an interest in; and level of commitment:

Department of Port Administration operates the only marine cargo transportation service to the outer islands. DPA is committed to providing this vital service as demonstrated in 2016 when it successfully found funding to have a ferry built and delivered to augment the ferry back then that only utilized one vessel. This project is positioned to do the same.

##### 1.3 Specific Commodities, markets, and shippers the Project is expected to attract:

All type of cargo is transported to the outer islands. Fuel ( Motor gas, diesel, marine diesel, LNG, and Kerosene) is the main commodity that this proposed designated project is expected to attract. This short sea shipping is the only option to ship fuel from fuel suppliers Pacific Energy and Clipper Oil.

##### 1.4 Extent to which interested entities have been educated about the project and expressed support:

The American Samoa Government has been briefed and educated on the need to have the SILI replaced. The support from ASG is assured as it is the only service provider in this market – there are no other vendors in this market.

##### 1.5 Marketing Strategy

The market strategy will mirror the one from 2016 when we sought and completed the building of a new ferry for the marine cargo ferry system to the outer islands. Detailed vessel specifications are developed using operational guidelines; potential shipbuilders (see Vessel Specifications on page 9)

## 2.0 Operational Framework



The proposed designated project operational framework covers a 24 month service plan. The schedule follows a bi-weekly sailing alternating regular cargo/passenger runs with hazardous material (fuel, LNG) runs. When the vessel is used as a fuel tanker, the number of passengers is decreased from 125 to only 25 passengers. Fuel runs carry both fuel and general cargo. While the bulk of the tonnage is going to the outer islands, the tonnage and passengers on return trips are minimal.

Cargo is loaded and unloaded using several modes: crane for lift on lift off of containers of pallets; forklift for palletized

cargo using the ramp; and vehicles and other wheeled equipment are rolled on /rolled off.

The ferry system is a 2.5 day round trip operation and departure and arrivals are timed to reach the outer island destination small boat harbors during daylight hours as an added safety factor entering and departing the harbors. The outer island port entrance channels are narrow and not lit at night. Cargo is delivered and loaded on the day of departure from 10am to 4pm. Passengers will then board at 10:30pm for an 11pm departure and sunrise arrival. The ferry will make two stops: Faleasao; then to Ofu where the vessel will overnight to allow for crew rest. The vessel will depart at sunrise, arriving in Pago Pago Port around 2pm; unload, wash down the vessel and prepare for the next operation. As part of the USCG Certificate of Inspection, the vessel will be officially dry-docked to inspect the underwater hull, rudders, propellers, keel coolers. Drydock maintenance is normally 1-2 weeks at which time the other ferry will take care of the outer island runs.

<i>Origin</i>	<i>Destination</i>	<i>Transit Time</i>	<i>Frequency</i>	<i>Vessel Type</i>	<i>Cargo Capacity</i>
Pago Pago	Faleasao	8hrs	Bi-Monthly	Ferry: Pax/Cargo	60tons
Faleasao	Ofu	1.5hrs	Bi-Monthly	Ferry: Pax/Cargo	40tons
Ofu	Pago Pago	7hrs	Bi-Monthly	Ferry: Pax/Cargo	10tons
Pago Pago	Faleasao	8hrs	Bi-Monthly	Ferry: Fuel Ops	33tons Fuel /60tons
Faleasao	Ofu	1.5	Bi-Monthly	Ferry: Fuel Ops	33tons Fuel/40tons
Ofu	Pago Pago	7hrs	Bi-Monthly	Ferry: Pax/Cargo	5tons
Pago Pago	Swains	24hrs	Quarterly	Ferry: Pax/Cargo	10tons
Pago Pago	Rose Atoll	19hrs	Quarterly	Ferry: Pax/Cargo	5tons
Pago Pago	Aunuu	1hr	Weekly	Transporter Ferry	1500lbs

## 3.0 Cost Model

The cost model for the acquisition of a replacement vessel will be based on established deliverables during the build: Milestone payments will be made based on completion of: design, outfitting, assembly, testing, trials and commissioning: Example of payment stages: Laying the keel; Laying the hull; Installing the engines, and machinery; Completing the superstructure; Installation; Finishing the interior; Finishing the exterior; Fairing and painting.

### 3.1 Comparison Cost Model

#### COST PER TRIP

<b>EXPENSES</b>	MANUATELE	SILI	Notes
<u>Fixed Expenses</u>			
Vessel Spe	\$3,846.15	\$ 5,769.23	Based on annual drydocking allocation of \$100k an \$150k / Avg annual trips (26) =
Crew Payroll	\$ 4,000.00	\$ 4,000.00	Average Salary Costs
Food / Provisions	\$ 300.00	\$ 300.00	Food for Crew and Contingency supplies
Insurance	\$ 3,846.15	\$ 4,200.00	Annual insurance cost/ number of trips
<b>Sub Total - Fixed Cos</b>	<b>\$ 11,992.30</b>	<b>\$ 14,269.23</b>	
<u>Variables Expenses</u>			
<u>Fuel</u>			
	9.5 knots	9 knots	Speed can increase to 10-12knots
Avg. Fuel Burn Per Gal/Trip	1,100	1,300	
Avg. Cost Per Gallon	\$ 3.25	\$ 3.25	Current Rate
Fuel Costs	<b>\$ 3,575.00</b>	<b>\$ 4,225.00</b>	
Crew / Staff OT	\$ 3,177.24	\$ 3,232.11	Avg. 207 hrs per trip / 18 crew and staff
<b>Sub-total for Variable Costs</b>	<b>\$ 6,752.24</b>	<b>\$ 7,457.11</b>	
<b>Estimated Costs Per Trip</b>	<b>\$ 18,744.54</b>	<b>\$ 21,726.34</b>	Fixed + Variable Costs

<u>Proposed Budget</u>	MANUATELE	SILI	
AverageCost Per Trip =	\$ 21,344.54	\$ 24,326.	
<b>COST PER SCHEDULED TRIP</b>	<b>Needed Funding</b>	<b>-</b>	<b>Equivalent to:</b>
8 Trips / year	\$ 149,956.33	\$ 194,610.73	est. 1 trip every 6.5 weeks
12 Trips / year	\$ 224,934.50	\$ 291,916.09	est. 1 trip every month
26 Trips / year	\$ 487,358.08	\$ 632,484.86	est. 2 trips every month - Current Schedule
52 Trips / year	\$ 974,716.16	\$1,129,769.72	est. 1 trip every week (4 times a month)

Additional Maintenance Required	\$ 75,000.00	Replacement Rudders
	\$ 225,000.00	Replacement Propellers
	\$ 68,000.00	Main Engine - Starboard
	\$ 42,000.00	Replacement Generator
	<b>\$ 410,000.00</b>	

### 3.2 Projects Financial Plan

#### Vessel Operating Costs: Projected Revenue and Expenses

	Year 1	Year 2	Year 3	Year 4	Year 5	Projected
	Oct-Sep	Oct-Sep	Oct-Sep	Oct-Sep	Oct-Sep	Increase
<b>OPERATION REVENUE</b>						
Passenger Fees	\$ 381,360.00	\$ 385,173.60	\$ 389,025.34	\$ 392,915.59	\$ 396,844.75	1.00%

Cargo Fees	\$ 1,117,440.00	\$ 1,150,963.20	\$ 1,185,492.10	\$ 1,221,056.86	\$ 1,257,688.56	3.00%
Charters	\$ 500,000.00	\$ 525,000.00	\$ 551,250.00	\$ 578,812.50	\$ 607,753.13	5.00%
<b>TOTAL REVENUE</b>	<b>\$ 1,998,800.00</b>	<b>\$ 2,061,136.80</b>	<b>\$ 2,125,767.43</b>	<b>\$ 2,192,784.95</b>	<b>\$ 2,262,286.43</b>	
% Change from Last Year		3.12%	3.14%	3.15%	3.17%	
<b>OPERATING EXPENSES</b>						
						Est. Increase
Personnel Services	\$ 179,133.00	\$ 193,463.64	\$ 208,940.73	\$ 225,655.99	\$ 243,708.47	8.00%
Materials and Supplies	\$ 29,500.00	\$ 29,824.50	\$ 30,152.57	\$ 30,484.25	\$ 30,819.57	1.10%
Fuel/Oil/Lubricants	\$ 289,744.00	\$ 295,538.88	\$ 301,449.66	\$ 307,478.65	\$ 313,628.22	2.00%
Contractual Services	\$ 14,000.00	\$ 14,154.00	\$ 14,309.69	\$ 14,467.10	\$ 14,626.24	1.10%
Shipyard/Dry Docking	\$ 60,000.00	\$ 61,800.00	\$ 63,654.00	\$ 65,563.62	\$ 67,530.53	3.00%
Travel	\$ 15,000.00	\$ 15,300.00	\$ 15,606.00	\$ 15,918.12	\$ 16,236.48	2.00%
Equipment	\$ 12,000.00	\$ 12,132.00	\$ 12,265.45	\$ 12,400.37	\$ 12,536.78	1.10%
All Others	\$ 20,000.00	\$ 20,220.00	\$ 20,442.42	\$ 20,667.29	\$ 20,894.63	1.10%
<b>TOTAL EXPENSES</b>	<b>\$ 619,377.00</b>	<b>\$ 642,433.02</b>	<b>\$ 666,820.52</b>	<b>\$ 692,635.39</b>	<b>\$ 719,980.92</b>	
% Change from Last Year		3.72%	3.80%	3.87%	3.95%	
<b>NET GAIN (LOSS)</b>	<b>\$ 1,379,423.00</b>	<b>\$ 1,418,703.78</b>	<b>\$ 1,458,946.91</b>	<b>\$ 1,500,149.56</b>	<b>\$ 1,542,305.52</b>	
% Change from Last Year		2.85%	2.84%	2.82%	2.81%	

### 3.3 Anticipated Changes in Short Sea Transportation affecting the project

Anticipated changes include development and expansion of the small boat harbors turning basins and widening of entrance channels better enhance the safety of the ferries when entering, utilizing and exiting the harbors.

### 3.4 Public Sector Financial Support

Financial assistance is requested for this proposed designate project and will be applied to the procurement of a replacement vessel for the American Samoa designated inter island waterways ferry system.

DESCRIPTION:	EST. COSTS:
Task Force Search for Vessel Designer and shipyard	\$ 30,000.00
Vessel Design / Specifications	\$ 200,000.00
Vessel Build / Shipyard Costs	\$ 8,125,000.00
Construction / Build Management	\$ 90,000.00
Preparation and Delivery of Vessel	\$ 200,000.00
Contingency	\$ 100,000.00
<b>TOTAL:</b>	<b>\$ 8,740,000.00</b>

### 4.0 Overall Net Public Benefits

The Public Benefits as applicable to this proposal are forthcoming. The marine highway project is for the procurement of a replacement vessel where there is very limited air service, denoting that sea service is the only economical route.



## 5.0 [Marine Highway Route Utilized](#)

The proposed Marine Highway designated route is under review for approval. The marine highway route consists of waterways and ocean channels used to transport goods, commodities and services between islands of the Territory of American Samoa, within the Exclusive Economic Zone (EEZ): Tutuila, Aunuu, Ofu, Olosega, Ta'u, Swains and Rose Atoll.

## 6.0 [Organizational Structure](#)

Under the umbrella of the American Samoa Government, the Department of Port Administration will lead the organizational structure and management of this proposed marine highway designated project as DPA has authority and responsibility over all of the seaport and airports in the Territory. Stakeholders include all of the residents and traveling public how live and visit the outer islands.

<u>Stakeholder</u>	<u>Affiliation</u>	<u>Role</u>	<u>Contribution</u>	<u>Letter of Support</u>
Am. Samoa Gov.	Local Government	Executive Branch	Oversight	Forthcoming
Dept. Ports	Local Government	Ports	Vessel Operators, Engineers, Specialist	Forthcoming
Outer Island Resident	Community	End Users	Use of Ferry Services	Forthcoming

## 7.0 Partnerships

### 7.1 Private Sector Partners

Private sector partners supporting this proposed project include Utility Companies: American Samoa Power Authority, American Samoa TeleCommunications Authority, Pacific Island Energy, Origin Gas, Construction/Contractors: McConnel Dowell, Fletchers and Paramount.

### 7.2 Public Sector Partners

Public Sector Partners supporting this project: American Samoa Government, Office of Samoan Affairs, AS Department of Health, AS Environmental Protection Agency, AS Department of Commerce, American Samoa Power Authority, Department of Public Works, Outer Island Residents relying on ferry Services.

### 7.3 Documentation

Letters of support for this proposed project are forthcoming.

## 8.0 Public Benefits

### 8.1 Emissions Benefits:

To be determined and submitted. This project aims to replace the obsolete vessel that has worn and outdated engines with newer ones that are technologically and environmentally advanced that meets USEPA Tier 3 emissions will definitely have emissions benefits.

### 8.2 Energy Savings:

The potential net reductions in energy consumption will be in the amount of fuel consumed.

From	To	Route	Approx. Miles	Mileage Per Year	Fuel Use Per Trip	Fuel Use Per Year
Pago	Manua	Inter Island	164	4264	1,300	33,800gal
Pago	Swains	Inter Island	400	1600	3,171	12,684gal
Pago	Rose	Inter Island	358	716	2,838	5,686gal

8.3 Landside Transportation infrastructure maintenance savings: To be determined and submitted.

#### 8.4 Economic competitiveness

This project will result in transportation efficiencies for the public by: having the capability of increasing the amount of trips the ferry operates; a savings in operational costs by minimizing down time; savings on travel time with larger horsepower engines; enhanced modes of loading and unloading saves on time.

#### 8.5 Safety Improvements

The current ferry system is the only marine transportation system to the outer islands. When the ferry system is down; residents find alternate means to transport people and goods that are not safe or efficient.



#### 8.6 System Resiliency and Redundancy

The proposed project enhances the resiliency of the current marine highway short sea service by replacing the current obsolete vessel with a newer and better suited vessel to meet growing needs of the traveling public. Redundancy is added by having a second vessel to provide the service, as there are no land based transportation system that bridges the open ocean to the outer islands.



### 9.0 Proposed Project Timeline

<u>Tasks</u>	<u>Est. Start Dates</u>
Task Force Search for Vessel/Shipyard	Month 1
Site Visits of Shipyards	Month 1
RFP for Design / Bidding Process	Month 2
Award RFP / NTP	Month 3
Build Start / Dry-Dock (Est. 10 months)	Months 4-14
Final Inspection/Trial runs	Month 15
Construction Complete	Month 16
Deliver Vessel (Est. 20-30 day journey)	Month 18
Trial Runs to outer islands	Month 19
Start Service	Month 20

## 10.0 Support and Investment Required

Issue	Risk	Mitigation	Budget Cost	Impact H/M/L
Shipyard Availability for build in with Project Schedule	High	Delay project to shipyard availability	TBD	H
Major changes to ship components/design are more time consuming and costly	High	Contract set prices that meet budget; amend build to meet budget	TBD	H
Change in operational costs different from estimates	Med	Adjust operation as necessary to meet budget and needed services	TBD	M

Investment in the overall operations include: ancillary equipment and materials for loading and unloading, ex: forklifts; lifting straps and equipment for crane; crew certifications and USCG licensing for vessel handling; 10-10 ft containers for cargo loading and delivery.

## 11.0 Environmental Considerations

The proposed marine designated project and activities will not individually or cumulatively have a significant effect on the human environment and qualifies as a categorical exclusion as provided for under 40 CFR 1508.4, Department of the Interior (DOI) NEPA Regulations at 43 CFR Part 46, and DOI Draft NEPA guidance for the Office of Insular Affairs (516 DM). As such, this action is excluded from the requirement to prepare an environmental assessment, environmental impact statement, and NEPA-related formal documentation.

## 12.0 Other Considerations

### 12.1 Confidentiality

This proposal application, including attachments, includes information that is considered confidential commercial and financial information.

## (D)Conclusion

The Department of Port Administration is given the mission to provide the only viable and economical means to transport people and goods to the community residing in the outer islands. It is currently operating two ferries that provide this service. However, one of the vessels is in such a state of disrepair that it is costing more to keep her in operation due to the age and obsolescence resulting in lost revenues and service because of increased down time.

The outer island residents are reliant on the regular short sea transportation of people, goods, and fuel from Tutuila. There is no land based highway to connect the islands, and air transport is sparse in comparison and costly. Marine transportation is the most viable economically and operationally.

The procurement of an additional vessel will greatly enhance inter-island travel and cargo operations. This vessel carries all types of cargo including hazardous materials such as fuel, propane, butane and other petroleum products. This vessel also is chartered by the utilities, construction companies and families to move goods and people. However, when it is necessary to perform maintenance on the vessel, no trips can be made until the maintenance and repairs are complete, resulting in low supplies for the residents of Manua. By adding another vessel to the fleet, it will add more flexibility to the transportation needs of Manua. It should be noted that anytime hazardous materials are transported, the allowable number of passengers on board is significantly decreased. By having another vessel, cargo and passenger trips can be better scheduled to accommodate both without interruption to either need.

The Department of Port Administration is pleased to submit this proposal for consideration and looks forward to a favorable response.

## **(E) Additional Program Background information**

### 1.0 Plans and Planning: To be submitted

#### 1.1 Where the Project Designation is associated with any planning documents:

This proposed designated project is in line with the American Samoa Economic Development Plan Implementation Plan 2017, Section II Sea Transportation B, C, D E: Secure reliable and appropriate sea transport for Manua, Aunuu, Swains, Neighboring Island Countries .

#### 1.2 Identify future planning studies: TBD and submitted

#### 1.3 Whether project will proceed without Project Designation:

Yes, this project will proceed, provided another funding source(s) can be secured.

#### 1.4 Whether the Applicant intends to seek Project Designation only:

DPA will continue to seek future Marine Highway Grant funding and support opportunities.

## **(E) Appendices**

## APPENDIX 1 Public Benefits Supporting Material

- To Be Submitted

## APPENDIX 2 Cost Model Supporting Data:

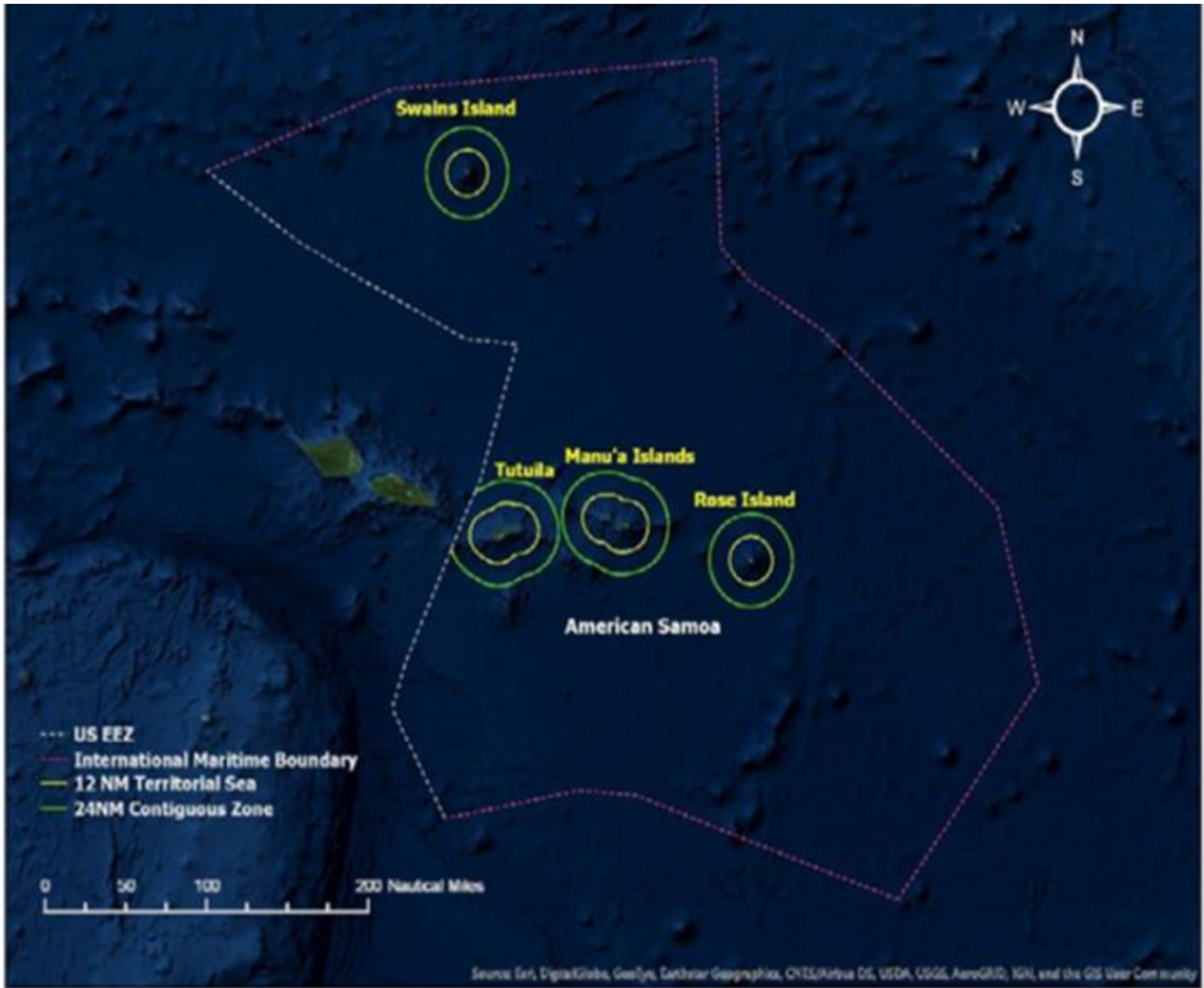
- To Be Submitted

### **APPENDIX 3    Financial Plan:**

- **To be Submitted**

### **APPENDIX 4    Map of Marine Highway Route:**







## APPENDIX 5 Letter of Support

- To Be Submitted



## APPENDIX 6 Other Supporting Material

- To Be Submitted



## APPENDIX 7 Checklist – Cross Reference of Topics and Page Location

Project Designation Application Checklist Appendices				
	Project Name	Inter Island Water Ways Multi Purpose Vessel	Check	Page
				No.
	Project designation	Introductory description, scope and need for the	X	1-8
	Background	project in relation to America's Marine Highway and		
	Information	an explanation of how the Project will fulfill this need.		
(A)	Minimum Eligibility requirements		X	10
1.1	Documented	Uses U.S. Documented Vessels -		10
	Vessels	landside congestion or promote short sea		
		transportation See (2).		
1.2	Carries Cargo in	Self-explanatory		11
	Short Sea Shipping			
1.3	Mitigates Landside	Self-explanatory		11
	Congestion			
2.1	Short Sea	Meets the definition of Short sea shipping. Short sea		11
	Transportation	transportation means the carriage by a U.S.		
		documented vessel of cargo (1) That is— (i) Contained		
		in intermodal cargo containers and loaded by crane on		
		the vessel; (ii) Loaded on the vessel by means of		
		wheeled technology; (iii) Shipped in discrete units or		
		packages that are handled individually, palletized, or		

		unitized for purposes of transportation; or (iv) Freight vehicles carried aboard commuter ferry boats; and (2) That is— (i) Loaded at a port in the United States and unloaded either at another port in the United States or at a port in Canada located in the Great Lakes-Saint Lawrence Seaway System; or, (ii) Loaded at a port in Canada located in the Great Lakes-Saint Lawrence Seaway System and unloaded at a port in the United States.		
2.2	New or expanded services	Involves new or expand existing services for the carriage of cargo		11
2.3	Designated Route	Are on a designated Marine Highway Route		11
3	Route Designation submission	Project Designation applications can be submitted with Route Designations (refer to Final Rule 393.2)		12
4	Direct Connection	Successful Project Applicants must demonstrate a direct connection between a proposed Marine Highway Project and the carriage of cargo through ports on Designated Marine Highway Routes.		13

(B)	Timing of Project	Announcements will be made by notice in the Federal		13
	Designation	Register and on M R D's MHP Web site open		
	submissions	season periods to allow Project Applicants		
		opportunities to submit Marine Highway Project		
		designation applications		
(C)	Project Application	What should Project Applicants include when		13
	Contents	preparing a Marine Highway Project designation		
		application		
1	Market and	The market or customer base to be served by the		13
	Customers	service and the service's value proposition to		
		customers. This includes:		
		(i) A description of how the market is currently served		
		by transportation options;		
		(ii) Identities of shippers that have indicated an		
		interest in, and level of commitment to, the proposed		
		service;		
		(iii) Specific commodities, markets, and shippers the		
		Project is expected to attract;		
		(iv) Extent to which interested entities have been		
		educated about the Project and expressed support,		
		and		

		(v) A marketing strategy for the project if one exists.		
2	Operational	A description of the proposed operational framework		14
	framework	of the project including:		
		Origin & Destination Pairs		
		Transit times		
		Vessel types		
		Service Frequency		
3	Cost Model	The cost model for the proposed service. The cost		14
		model should be broken down by container, trailer, or		
		other freight unit, including loading and discharge		
		costs, vessel operating costs, drayage costs, and other		
		ancillary costs.		
3.1		Provide a comparison cost model outlining the current		14
		costs for transportation using		
		landside mode (truck		
		and rail) alternatives for the identified market that the		
		proposed project will serve.		
3.2		Provide the project's financial plan and provide		15
		projected revenues and expenses. Include labor and		
		operating costs, drayage, fixed and recurring		

		infrastructure and maintenance costs, vessel or		
		equipment acquisition or construction costs, etc.		
3.3		Include any anticipated changes in local or regional		16
		short sea transportation, policy or regulations, ports,		
		industry, or other developments affecting the project.		
3.4		In the event that public sector financial support is		16
		being sought, describe the amount, form and duration		
		of public investment required. Applicants may email		
		mh@dot.gov to request a sample cost model.		
4	Overall Net Public	An overall quantification of the net public benefits		16
	Benefits	estimated to be gained through the successful		
		initiation of the Marine Highway Project, including		
		highway miles saved, road maintenance savings, air		
		emissions savings, and safety and resiliency impacts.		
		In other words, the collective savings from section 8.		
5	Marine Highway	Identify the designated Marine Highway Routes the		17
	Route utilized	Project will utilize.		
6	Organizational	Provide the organizational structure of the proposed		17

	Structure	project, including an outline of the business		
		affiliations, environmental, non-profit organizations		
		and governmental or private sector stakeholders.		
7	Partnerships:			17
7.1	Private sector	(i) Identify private sector partners and describe their		17
	partners.	levels of commitment to the proposed service. Private		
		sector partners can include terminals, vessel		
		operators, shipyards, shippers, trucking companies,		
		railroads, third-party logistics providers, shipping lines,		
		labor, workforce and other entities deemed		
		appropriate by the Secretary.		
7.2	Public sector	(ii) Identify State Departments of Transportation,		17
	partners.	metropolitan planning organizations, municipalities		
		and other governmental entities, including tribal		
		entities, that Project Applicants have engaged and the		
		extent to which they support the service. Include any		



		affiliations with environmental groups or civic associations.		
7.3	Documentation	(iii) Provide documents affirming commitment or support from entities involved in the project.		17
8	Public benefits.	These measures reflect current law and are consistent with USDOT’s Strategic Goals. Project applicants should organize external net cost savings and public benefits of the Project based on the following six categories:		17
8.1	Emissions benefits	(i). Address any net savings, in quantifiable terms, now and in the future, over current emissions practices, including greenhouse gas emissions, criteria air pollutants or other environmental benefits the project offers.		17
8.2	Energy Savings	(ii) Provide an analysis of potential net reductions in energy consumption, in quantifiable terms, now and in the future, over the current practice.		18
8.3	Landside transportation	(iii) To the extent the data is available indicate, in dollars per year, the projected net savings of public		18

	infrastructure	funds that would result in road or railroad		
	maintenance	maintenance or repair, including pavement, bridges,		
	savings			
		tunnels or related transportation infrastructure from a		
		proposed project.		
8.3.1	Landside	Include the impacts of accelerated infrastructure		18
	transportation	deterioration caused by vehicles currently using the		
	infrastructure	route, especially in cases of oversize or overweight		
	maintenance	vehicles. This information applies only to projects for a		
	savings	marine highway service where a landside alternative		
		exists.		
8.4	Economic	(iv) To the extent the data is available, describe how		18
	Competitiveness	the project will measurably result in transportation		
		efficiency gains for the U.S. public. For purposes of		
		aligning a project with this outcome, applicants should		
		provide evidence of how improvements in		
		transportation outcomes (such as time savings,		
		operating cost savings, and increased utilization of		

		assets) translate into long term economic productivity		
		benefits.		
8.5	Safety	(v) Describe, in measurable terms, the projected		18
	Improvements	safety improvements that would result from the		
		proposed operation.		
8.6	System Resiliency	(vi) To the extent data is available, describe, if		18
	and Redundancy	applicable, how a proposed Marine Highway Project		
		offers a resilient route or service that can benefit the		
		public. Where land transportation routes serving a		
		locale or region are limited, describe how a proposed		
		project offers an alternative and the benefit this could		
		offer when other routes are interrupted as a result of		
		natural or man-made incidents.		
9	Proposed project	Include a proposed project timeline with estimated		18
	timeline	start dates and key milestones. If applicable, include		
		the point in the timeline at which the enterprise is		
		anticipated to attain self sufficiency		



10	Support and	Describe any known or anticipated obstacles to either		19
	investment	implementation or long-term success of the project.		
	required.	Include any strategies, either in place or proposed, to		
		mitigate impediments. Identify specific infrastructure		
		gaps such as docks, cranes, ramps, etc. that will need		
		to be addressed in order for the project to become		
		economically viable. Include estimates for the		
		required investments needed to address the		
		infrastructure gaps.		
11	Environmental	Project Applicants must provide all information		19
	considerations	necessary to assist M R D's environmental analysis of		
		the proposed project, pursuant to the National		
		Environmental Policy Act of 1969 (NEPA) (42 U.S.C.		
		4321 et seq.) and other environmental requirements		
12	Other considerations			19
12.1	Confidentiality	If your application, including attachments, includes		19
		information that you consider to be a trade secret or		
		confidential commercial or financial information, or		

		otherwise exempt from disclosure under the Freedom of Information Act (5 U.S.C. 552), as implemented by the Department at 49 CFR part 7, you may assert a claim of confidentiality.		
12.2	Application length	The narrative portion of an application should not exceed 20 pages in length. Documentation supporting the assertions made in the narrative portion may also be provided in the form of appendices, but limited to relevant information. Applications may be submitted electronically via <a href="http://www.regulations.gov">regulations.gov</a> ( <a href="http://www.regulations.gov">http://www.regulations.gov</a> ). <a href="#">Applications submitted</a> in writing must include the original and three copies and must be on 8.5" x 11" single spaced paper, excluding maps, Geographic Information Systems (GIS) representations, etc.		
(D)	Conclusion			19
(E)	For Program Background, only			20
1.1		Freight Plans, Port Plans, State STIP/TIP or other approved planning documents		20
1.2		Identifying future planning studies that will be		20

		required prior to or part of any future Marine Highway		
		Grant funding		
1.3		Whether the Project will proceed without Project		20
		Designation		
1.4		Whether the Applicant only intends to seek Project		20
		Designation only (no intention to apply for future		
		Marine Highway Grant funding opportunities		