



Pacific CRVS

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DATA FOR
HEALTH INITIATIVE



Pacific
Community
Communauté
du Pacifique

Innovations and Challenges – the US Affiliated Pacific Islands

The Pacific Community (SPC)



- The Pacific is 1/3 of the world's surface
- SPC is the premier technical and scientific organisation in the Pacific
- Oldest Pacific regional organisation (est. 1947) and the largest (27 members; 800+ staff; \$130m budget)
- Areas include Public Health, Education, Fisheries, Geoscience, Environment Sustainability, Human Rights and Social Development, and Statistics

22 Pacific Countries and Territories

AS	American Samoa
CK	Cook Islands
FM	Federated States of Micronesia
FJ	Fiji
PF	French Polynesia
GU	Guam
KI	Kiribati
MH	Marshall Islands
NR	Nauru
NC	New Caledonia
NU	Niue
MP	Northern Mariana Islands
PW	Palau
PG	Papua New Guinea
PN	Pitcairn Islands
WS	Samoa
SB	Solomon Islands
TK	Tokelau
TO	Tonga
TV	Tuvalu
VU	Vanuatu
WF	Wallis and Futuna



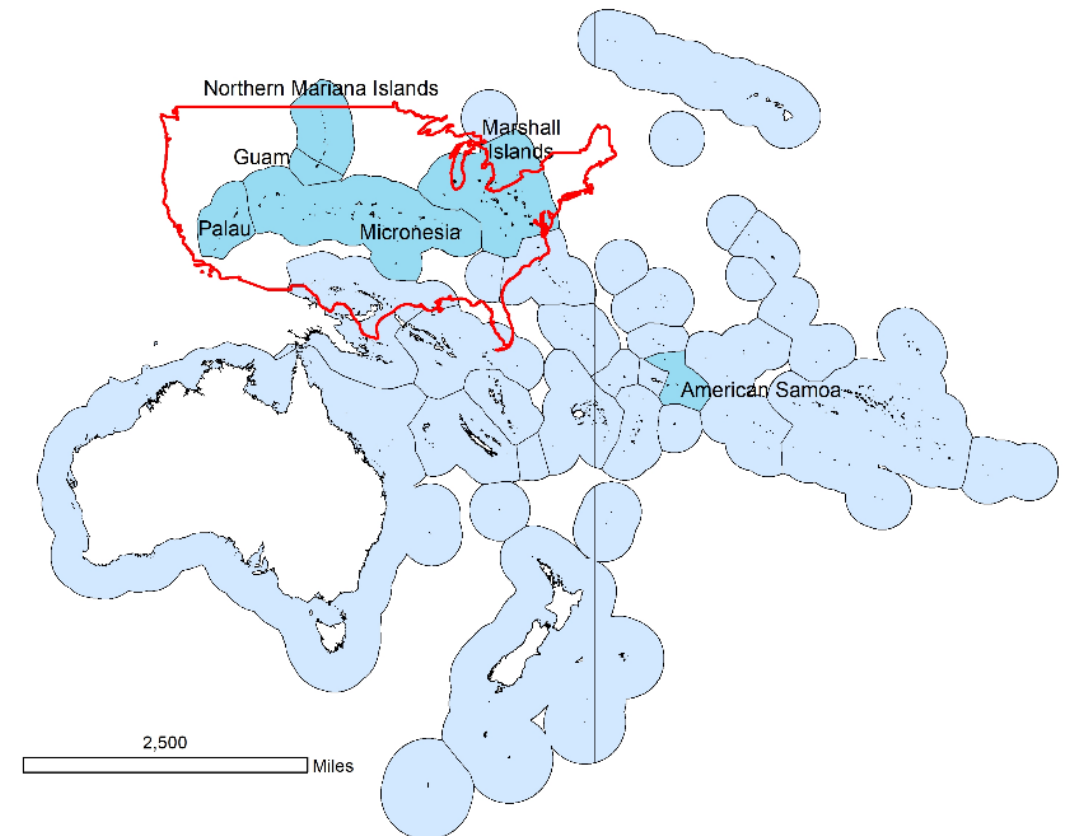
22 PICTs with their Exclusive Economic Zones (200 nautical miles from coastlines)

6 US-Affiliated Pacific Islands (USAPIs)



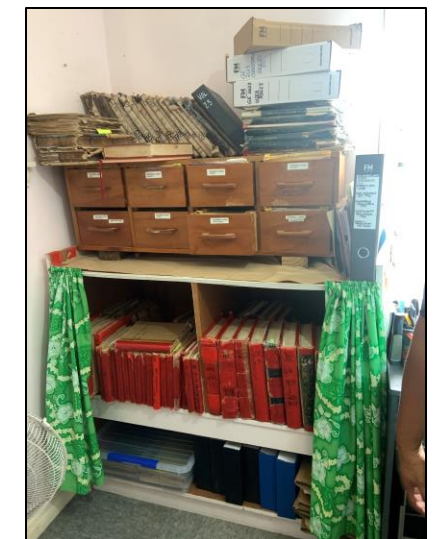
Large ocean, small land

The US-Affiliated Pacific Islands (USAPIs)		Population (2015 est)	Land Area (sqm)	Ocean Area (EEZ) (sqm)	Percent Land	Max Elevation (ft)
US Territories	American Samoa	54,343	76	117,500	0.06%	3,170
	Guam	161,785	212	84,170	0.25%	1,332
	Northern Mariana Islands	52,344	184	289,294	0.06%	3,166
Freely Associated States (FAS)	Federated States of Micronesia	105,216	271	1,156,924	0.02%	2,566
	Marshall Islands	72,191	70	822,784	0.01%	33
	Palau	21,265	189	237,850	0.08%	794
Totals		467,144	1,002	2,708,522		



Some common challenges

- Small populations, spread over multiple islands
- Public servants wear many hats
- Low-income economies reliant on overseas funding
- Frequent flooding, fire, earthquakes and volcanoes
- Registration systems paper-based or using old technology
- No on-island technical support
- Few incentives for registration, especially death
- Different operating models and multiple agencies



American Samoa (Les Tua)



TALOFA LAVA, MALO LE SOIFUA



Our Place



American Samoa Flag



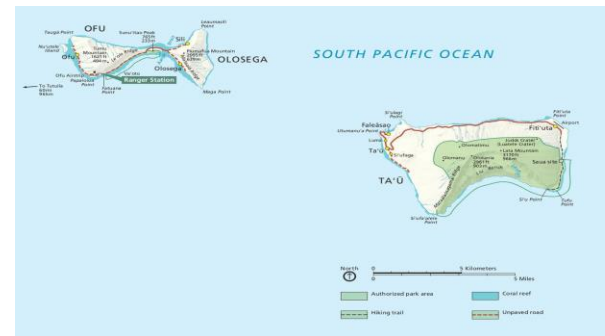
Government Seal

- “Unincorporated and Unorganized Territory”
- No Federal Courts
- Own immigration laws
- Legislature – House of Representatives are elected and Senators are selected from the County Council of Chiefs
- Only inhabited US Territory South of the equator. About 2,200 miles southwest of the State of Hawaii
- 5 inhabited volcanic islands and 2 uninhabited atolls - total land area of 77 square miles
- Highest rate of military enlistment per capita of any US States or Territories
- US Flag was first raised April 17th, 1900. This year marks 125 years of this relationship

National Park of American Samoa



- The park is across three islands. Total area of 8,257 acres of land, coral reefs and ocean
- Established by Congress on October 31, 1988 with Public-Law 100-571
- Preserves and protects coral reefs, rainforests, fruit bats and culture



Our Place

Population

49,710

- 2020 Census showed a drop from 2010 count of 55,519 (-5,809)
- 25,254 Males – 24,456 Females
- 83.2% Samoan
- 5.5% All other Pacific Islanders – with 2.2% are Tongans
- 5.8% Asians – with 3.4% are Filipino



AMERICAN SAMOA OFFICE OF VITAL STATISTICS



Courts

Hich Court
District Court



Department of Health
American Samoa

Consist of 5 Public Health Clinics

LBJ Medical Center

The main and only hospital

AMERICAN SAMOA DEPARTMENT OF HOMELAND SECURITY

- The Office of Vital Statistics has a history of moving from one agency to another
- Civil Defense Act of 2008



Our Civil Registration System



**Department
of Health**
American Samoa



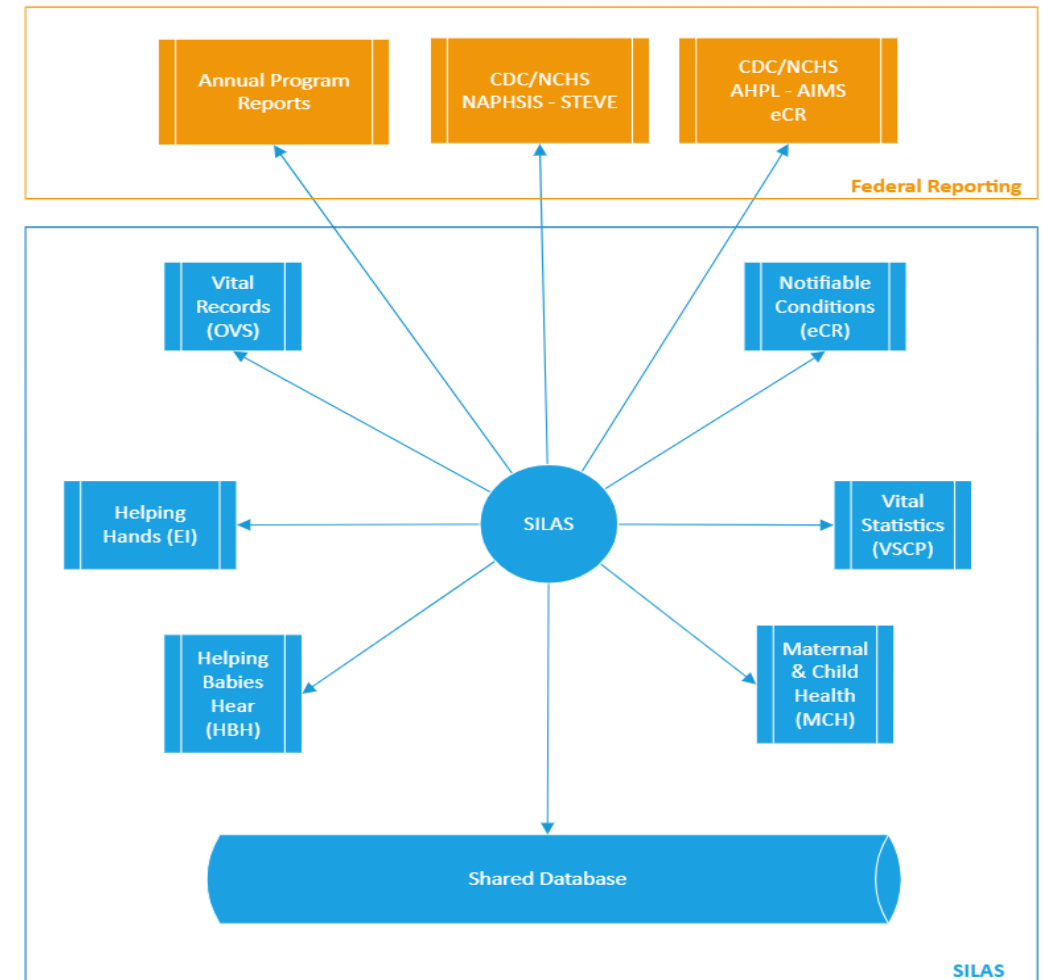
Office of Vital Statistics

- Depository
- Safekeeping
- Verification
- Issuance
- Reporting



C.D.C

VENDOR: FamilyTrac Inc



Our Challenges and Needs

- Digitization of Vital Records
 - Need Funding
 - Staffing
 - Equipment
- Records Duplication
 - Hospital and Public Health entering the same record
 - Office of Vital Statistics making amendments to record
 - Paternity
 - Adoptions
 - Name Change
- Legislation
 - New legislation

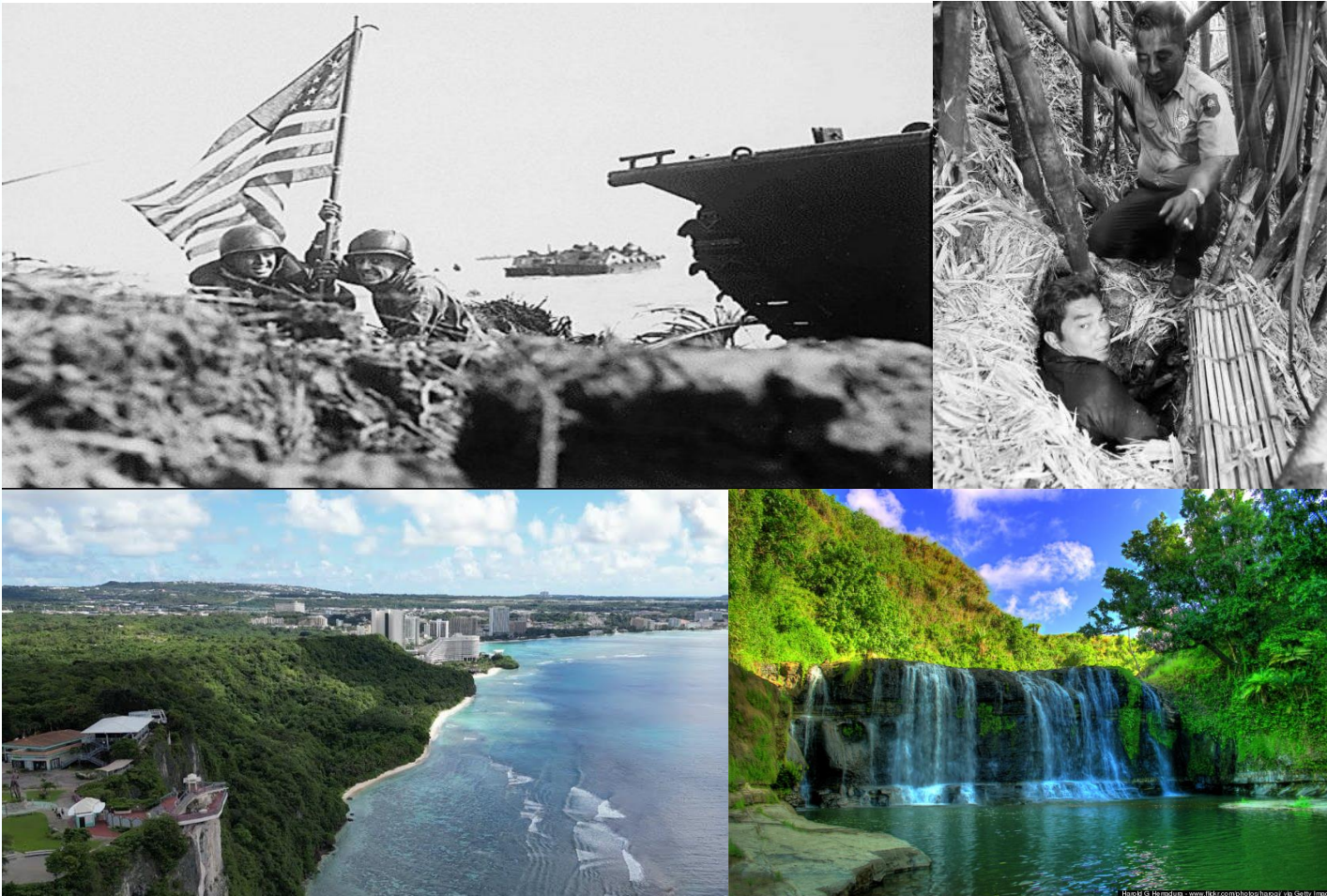
Guam (Christine Baza)



Hafa Adai from Guam
Where America's Day Begins

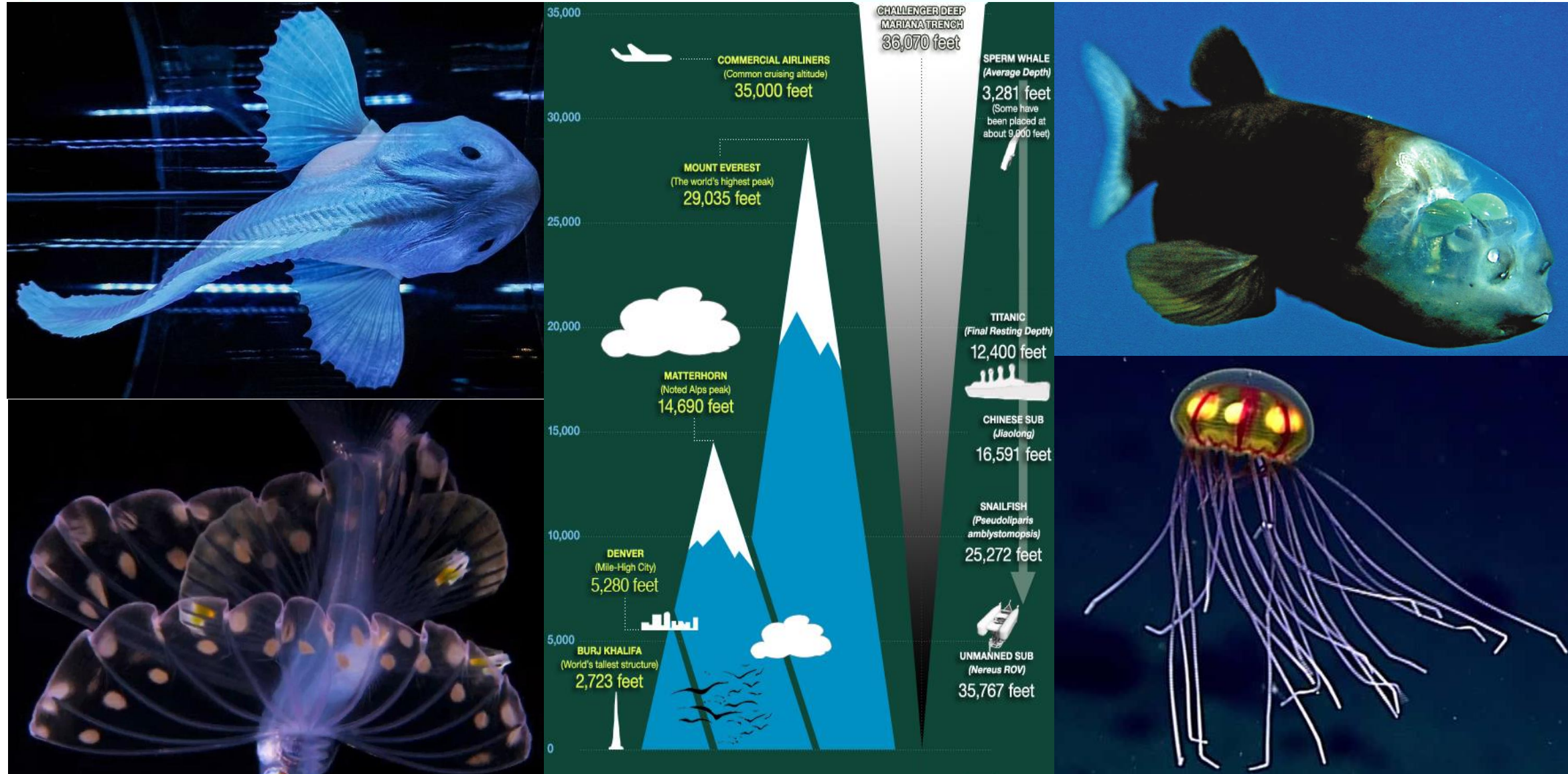


Our Place



- Bombed by the Japanese hours after the attack on Pearl Harbor on December 8, 1941.
- The only US Territory that was occupied by the Japanese in WWII.
- Liberated by American forces on July 21, 1944.
- Japanese straggler Sgt. Yokoi was found in Guam's jungles in 1972.
- Guam has one of the highest military enlistment rates per capita in the nation.
- James Cameron has been to the bottom of the Marianas Trench's Challenger Deep.

Marianas Trench



Our Place

Population

153,8

- 46.0% Pacific Islander / Native Hawaiian

36

35.5% Asian

- 6.8% White
- 11.7% All Others



Source: Census 2020

History

Public Health Facilities:

- NCHC
- SCHC

Stats

Hospital Facilities:

- GMHA
- GRMC
- USNH

Source: 2023 Guam Statistical Yearbook

Vital Records

Guam Birth and Death records are available from October 26, 1901

USN

1944-1964
Vital Statistics managed by the US Navy

DPHSS

Created by 5 GCA, Chapter 3, Article 1, §3111 on July 1, 1964

OVS

Created by 10 GCA CH.3, Article 2 by PL 22-130 on May 31, 1994

Event	2023	2022	2021	2020	2019	2018	Over 5 Year Period
Births	2,378	2,520	2,630	2,938	3,057	3,175	- 25%
Deaths	1,193	1,247	1,281	1,193	1,035	1,056	+ 13%

Cause of Death (2023)	Number of deaths	Percent of all deaths
Heart Disease	292	24.48%
Cancer	181	15.17%
Accidents/unintentional injuries	94	7.88%
Cerebrovascular disease	74	6.20%
Septicemia	42	3.52%

Our Civil Registration System

- Guam OVS manages births, deaths and marriage registration using three separate systems
 - Death Registrations
 - Paper
 - Prone to errors
 - Birth Registrations
 - STEVE
 - Not supported since 2015
 - Marriage Registrations
 - Custom developed
 - Not supported since 2018

Our Challenges

- Having three old, unconnected systems
- Ensuring the completeness and accuracy of birth and death certificates
- Cause of Death is not standardized on death certificates
- Data linkage between OVS and stakeholders
 - Hospitals
 - Office of the Chief Medical Examiner
 - Mortuaries
 - NAPHSIS
 - NCHS
 - SSA

Our Needs

- Integrated Vital Registration System to manage Birth, Death and Marriage Registrations
 - Implementation of a Death Registration System supported by VSCP and DMI funds.
- Digitization of Birth, Death and Marriage Certificates
- Stable funding source to support maintenance of an integrated vital registration system
- Legislation to raise fees for services

Northern Mariana Islands (Wilbert Rospel)



Did you know that...?

Tinian was the take off point for the Enola Gay, the plane which dropped the atomic bomb on Hiroshima, August 6, 1945.



Source: accessed at http://en.wikipedia.org/wiki/Northern_Mariana_Islands

Our Place

Population

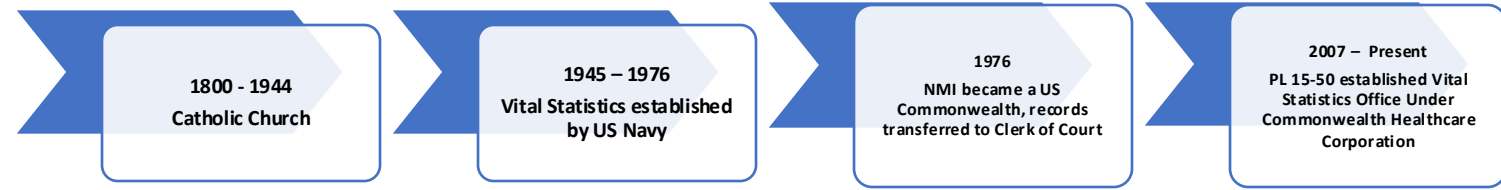
47,32

- **46.6%** Asian
- **43.7%** Pacific Islander / Native Hawaiian
- **9.7%** All Others



Source: Census 2020

History of Vital Records in the Northern Mariana Islands (NMI)



Healthcare facilities in the NMI

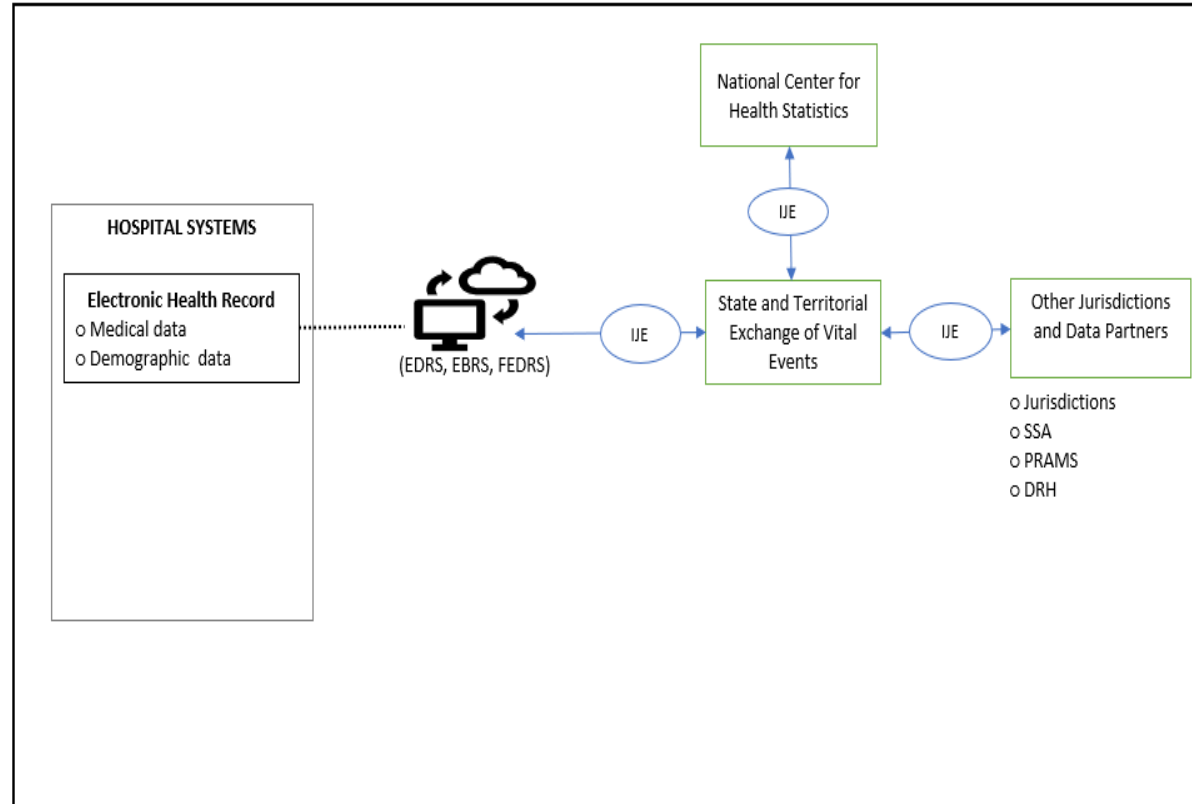
Commonwealth Healthcare Corporation (CHCC)

- Commonwealth Health Center (CHC)
- Tinian Health Center (THC)
- Rota Health Center (RHC)
- Health and Vital Statistics Office (HVSO)

- Births declined by 50% over the past five years, dropping from 1,140 to just 568.
- Deaths slightly increased by 10%, from 220 to 242.
- Top 5 Causes of death: Heart diseases 72(30%); Cancer 50 (21%); Diabetes Mellitus 25 (10%); External Causes of Mortality 19 (8%); and respiratory diseases 14 (6%)

Our Civil Registration System

ELECTRONIC VITAL REGISTRATION SYSTEM PROCESS MAP, 2020-2022



Electronic Vital Registration System (EVRS)

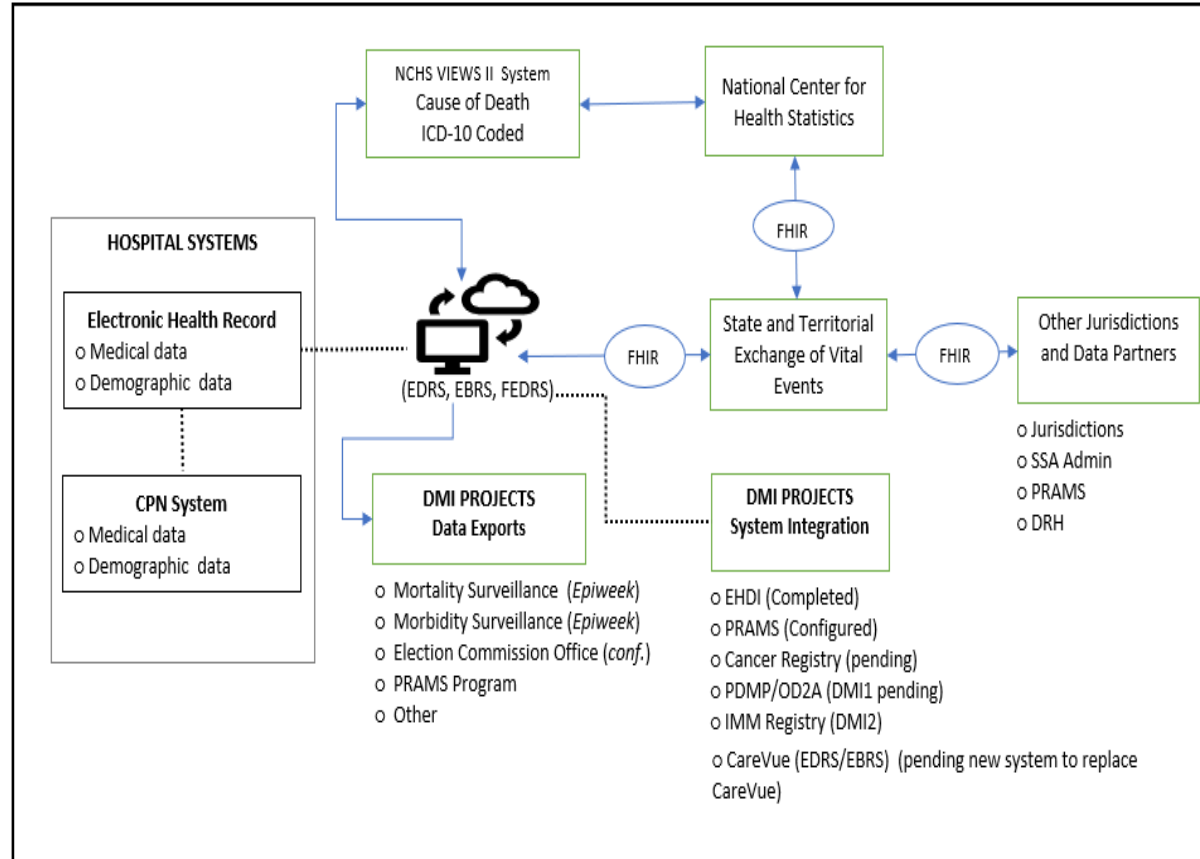
- System vendor: Axiell ALM, Inc., New York
- ☐ Cloud hosted

History of EVRS system

- 2012 – STEVE-ER implemented
- 2015 – STEVE-ER system support ended
- 2016 – Territories requested for funding support
- 2018 – Received funding support from NCHS
- 2019 – Selected Vendor (off-the-shelf software)
- 2020 – Fully implemented
- 2021 – DMI Initiatives, ELC Tier 3 funding support
- 2024 – FHIR Certification achieved

Our Civil Registration System

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Our Challenges and Needs

a) Data Modernization

- ✓ Funding to further enhance system to improve processes and data quality
- ✓ Expand system integration with other systems and/or data partners
- ✓ Create data exports for data users (mortality and morbidity data)
- ✓ Record digitization and migration to EVRS system
 - ❑ 1945 – 2019 Birth and Death Records

b) Training Modules to Improve Data Quality

- ✓ Physicians Cause of Death Reporting Training
- ✓ Staff professional development trainings (analytics)

Panel Discussion

Ask us anything you want!

