



**GUAM PUBLIC LIBRARY SYSTEM  
TECHNOLOGY PLAN  
October 2008 – September 2011**

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# Guam Public Library System

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## Technology Plan October 2008 – September 2011

### I. Introduction

Guam is the westernmost territory of the United States and is known as the place “Where America’s Day Begins”. The total land area of Guam is approximately 215 sq. miles (roughly 546 sq. km), and it is located 3,700 miles from the state of Hawaii, and 6000 miles to the west coast of the U.S. mainland. Such distance establishes Guam’s uniqueness as a bridgehead to Oceania, Asia, and the Americas. The two official languages on Guam are English and Chamorro; however, only about 29% of the entire population on island can speak both languages. Guamanians of Chamorro descent comprise the majority of the population. The remaining minority group is composed of non-Chamorros that have entered Guam for various reasons from other parts of the world. The ethnic categorization of 2000 indicates that approximately 37.1% of the civilian population on Guam are Chamorros or part Chamorros; 26.3% are Filipinos; 11.3% are Caucasian; 11.3% are other Micronesian and Pacific Islanders such as Marshallese, Yapese, Kosraeans, Pohnapeans, Chuukese, Palauans, etc. The remaining 25% population is comprised of Chinese, Koreans, Japanese, Vietnamese, Malaysians, Indonesians, Indians, Pakistanis, Africans, and many others. Culturally, Guam is Oceania, Asia, America, and the world at the same time. The first libraries on Guam were small collections of religious books kept by Spanish priests. Shortly after the United States Government occupied Guam in 1899, a library for the U.S. military personnel and their dependents was established. Library services to local people in the year before WWII was limited to a small collection of books set up in 1909 for teachers and a small circulating library organized in 1924. It was not until after World War II that a public library was established in Guam. An initial collection of 13,000 books from deactivated Navy libraries and a donation of discarded books from the Los Angeles/Public Library were housed in two Quonset huts. Today the Guam Public Library System (GPLS) is composed of a main library in the capital of Hagatna, five branch libraries and a bookmobile. GPLS also provides services to the Department of Youth Affairs for troubled youths and the Department of Correction’s library for prison inmates. In addition, the library serves other Guam village residents with participating municipalities. A library technology plan helps the library to prepare for both changing technologies and the need for new services.

Currently, the collection of the GPLS, including print and non-print materials, totals over 255,000 items. Story hour programs are offered for pre-school and school-aged children throughout the year on Saturday mornings. The Summer Reading Program for all ages is offered annually. From time to time, special programs such as Teen Read Week, Read Across America, and National Library Week activities are organized. During the school year, tours of the public libraries are arranged in cooperation with classroom teachers and other interested groups. The mission of GPLS is to provide the island community with resources for intellectual and informational pursuits and to provide an open environment which will further those pursuits. The Board of Directors of GPLS is responsible for approving the library technology plans in Guam.

## II. Mission Statement

The Guam Public Library System will provide free and open access to information and ideas fundamental to a democracy to every resident of Guam, and will protect intellectual freedom, promote literacy, encourage lifelong learning, and maintain cultural materials.

## III. Technology Vision Statement

The people of Guam and the surrounding community will have convenient access to electronic information resources through proven technology and telecommunications. In the virtual and physical libraries, our role will be to provide value-added products and services which guide and direct customers to excellent sources of electronic information. Patrons will be assisted as needed by a sufficient number of knowledgeable, trained staff who can help them make the best use of both new and traditional information resources. Staff will be supported by up-to-date technology to ensure quality services that are efficient and cost-effective.

## IV. Goals and Objectives

**Goal I: Provide telecommunication resources to improve the delivery of library services to the community of Hagatna, Dededo, Barrigada, Yona, Agat, Merizo and the Bookmobile. (General, Telecommunication, phone, ICN, circuit, internet)**

**Summary Needs Assessment:** In order to provide sufficient access and support of literacy and lifelong learning to our residents in Guam, the Guam Public Library System (GPLS) will need to upgrade their telecommunication resources at their remote locations. GPLS will need digital transmission services to provide internet service to patrons which will improve access to the on-line Library Catalog; provide network service for each library to allow for the data entry into the electronic library catalog; and allow for access to the AS400. A sonic wall content management is needed for all our branches and the Bookmobile, providing secure access to the library card forms, databases and the internet.

**Objectives:** GPLS will have the six branches and bookmobile connect to the main "HUB" branch with library, internet services, active directory services, AS400 services, the electronic library catalog, and will be in compliance with the Children Internet Protection Act (CIPA). By the end of September 30, 2009, the library will have increased their patron levels by at least 100 residents per village served; provide additional public computers for citizens to access information for their educational, informational, and research use; develop a video relay service in conjunction with the Deaf Literacy Center to provide library services to individuals with hearing impairments; incorporate secure and reliable technology to improve the efficiency of workflow and customer satisfaction. *Timeframe: 2008-2009.*

**Goal II: Provide updated technology equipment and resources to enhance and improve services to the library.**

**Summary Needs Assessment:** In order for the Guam Public Library System (GPLS) to continue promoting literacy and computer training in their branch communities, GPLS will have to purchase **updated hardware and software** to meet the growing needs of the patrons.

**Objectives:** GPLS will provide their library staff and patrons with a reliable network access to the on-line library catalog, to help increase patronage and customer satisfaction. Personal computers (PCs) will be available for research and homework use. GPLS will continue to conduct and develop technology education for the community, focused on information literacy, such as basic electronic or internet search and research techniques. Education programs will target children ages 5 to 14 (ex: Computer Mouse Academy), as well as adults and the elderly. *Timeframe: 2008 -- 2010*

Tasks include:

- Add at least two new workstations to the five branches by *December 2009*.
- Increase public use of library workstations from an average of 25% per month *from October 1, 2009 through September 20, 2010*
- Increase public access to the library's Web site by 30% (adding a counter to tabulate the number of visitors). *October 1, 2008 through September 20, 2011*
- Add access to Horizon SirsiDynix to GPLS' public work stations. *October 1, 2008 through August 30, 2009*
- Review and update the GPLS Internet Use Policies. *May 2009*
- Provide additional library Web links to electronic information in areas of job training, government, career guidance, and consumer information. *Fiscal year 2009*
- Implement information literacy classes for the public.
- Provide a user-friendly GPLS Web page that allows for access to electronic resources from home or work. *January 2010*

**Goal III: Provide the Guam Public Library System (GPLS) Staff Intranet Connections (LAN) for all branches and the Bookmobile to improve administrative and library service operations.**

**Summary Needs Assessment:** In order for GPLS to develop a Local Area Network, the library would have to purchase and install a Microsoft active directory for a Windows Media Service, Terminal Service, Microsoft Systems Management, Service Object Architecture programs, to include building the Repository services and providing remote services to the library branches.

**Objectives:** To have an intranet infrastructure in place that will result in improved productivity and enhancements (by 20%) due to additional features to existing equipment. *Timeframe: 2008 -- 2009*

Tasks include:

- Research needs for the installation of library LAN, to include consultation services. *Fiscal Year 2010, October/December 2010*
- Purchase and install server, networking software and at least two (2) client machines. *Fiscal Year 2010, June/December 2010*
- Install LAN throughout the library. *Fiscal Year 2010, June/December 2010*
- Complete the change from a paper-based circulation system to an automated system. *June/December 2010*

**Goal IV: Provide additional electronic accessibility to the Guam Public Library System's on-line library catalog system (Horizon) to increase accessibility and improve processing of library materials and resources.**

**Summary Needs Assessment:** To improve time management and processing of library materials by library staff, an **additional digital transmission service** is needed. The Guam Public Library System (GPLS) staff have been limited to the main branch's on-line system to accomplish critical tasks needed to input and process new materials into the electronic library system. The additional lines will allow the staff to process at the remote branches, eliminating duplication of efforts and improving the reporting of library statistics.

**Objectives:** GPLS staff will have network access to the on-line library catalog system (Horizon) at all branches and will increase processing services. *Timeframe: 2008 -- 2010*

Tasks include:

- Add access to the Horizon, a shared library automation system (6 libraries) supported by the Library Association.
- Promote reciprocal borrowing (including Interlibrary Loans) among the libraries and coordinated by GPLS.
- Provide necessary technology training to library staff related to the Horizon library system.

## V. Professional Development Strategy

**First Year:** The Guam Public Library System (GPLS) sees itself as an ideal educational platform in the future. Our endless efforts to increase our service and program capabilities will show it proudly, as we enter the 21<sup>st</sup> Century. GPLS will be a technically proficient and technologically advanced system, to better serve the growing needs of our multi-lingual communities. As technology advances, GPLS intends to advance with it. Therefore, professional development will be an on-going process with both staff and patrons to ensure their enhanced skills and knowledge. The GPLS staff will be trained on levels from introduction to advanced. The staff will attend at least one training session dealing with the internet and intranet. The staff will be trained in implementation and use of the LAN and software for the six library branches. The

library director and at least two other staff member will be trained on LAN and server administration.

**Second Year:** The staff will develop a set of written instructions for new staff members and the public on the use of the hardware and software, including the Internet. Send assigned staff members to Webmaster and HTML training.

**Third year:** Continue to send staff members to appropriate training on advanced use of the Internet and Web.

Staff members have been adequately trained on the use of the telephone system and new staff will be trained as needed. Ongoing

All library staff will be provided in-service training in technology using the Department of Administration Training and Development, the University of Guam, Guam Community College, and the Guam Public Library System area workshops whenever possible. Additional commercial workshops will be used when necessary. Ongoing

All library staff will be trained on the use of the ICN equipment; how to operate and conduct basic troubleshooting. *Fiscal Year 2008*

By December of 2008, all staff will have been trained on using the EBSCO host and will be able to direct patrons on its use.

By December of 2008, all staff will have completed in-house training on information literacy strategies and will be proficient in providing the public with these strategies.

- Office Productivity Software (Microsoft Office) Excel – Basic opening software, saving, formatting, spreadsheet operations, and inserting graphics
- Internet Explorer skills
- On-line Library Catalog
- Computer Skills

## VI. Equipment Assessment

The Guam Public Library System (GPLS) holdings are accessed through the web catalog shared by six branch libraries. Powered by the SirsiDynix Horizon system, it provides circulation, acquisitions, cataloging, serials, searching, and inventory functions. This web based system allows patrons to also access the catalog remotely.

The Library provides access to multiple forms of information through its LAN (local area network) and its WAN (wide area network). The Hagatna local area network is comprised of two Windows 2003 servers (Library Catalog), one Windows 2000 Server (Active Directory) and less than 20 patron access workstations with Windows 2000 or XP. Other libraries have 6 patron access workstations with Windows 2000 or XP. There

are 22 employee laptops that rotate among the libraries. The LAN uses the TCP-IP protocol either on wired Ethernet or wireless 802.11g.

The Guam Public Library System receives its Internet and network services through the Department of Administration-Data Processing Division (DOA-DPD) and through a local vendor GTA LLC. GTA licenses a T-1 circuit on GPLS's behalf as well as circuits for six branch libraries. These circuits are aggregated at GPLS. The libraries and DOA-DPD Datacenter share a 512Kbps connection to the Internet. These services are provided by contract with GTA. GTA monitors network usage and acquires additional bandwidth and resources as required by growing demand.

The reference department has three networked computers for reference assistance and staff work. Four employee laptops are used for cataloging, acquisitions and interlibrary loan. All computers in the library are attached to a printer. The library's web page, [www.gpls.guam.gov](http://www.gpls.guam.gov), Internet access, and Email service, mail.gov.gu, is provided through DOA-DPD. Additionally, the library has 25 lines in the library system: five branch phones, five branch fax lines, fourteen phone lines, and one fax line.

The library supports wireless access provided by a wireless firewall router. This allows more flexibility in scheduling computer training classes. Finally, the library allocates four computer's setup with Department of Administration finance software (AS400) and is used only for department budget transactions by library administrative support staff.

What GPLS intends to do is continue to hold education trainings for the staff development on how to handle the circulation, reference, and processing of all new and donated books.

GPLS administration will monitor the library technicians' productivity utilizing all technology equipment around the libraries to ensure full completeness of handling the equipments such as how to do the advance multi-function devices, wide formats devices and document imaging on the Xerox machines stationed at all branches.

GPLS will conduct periodic in-house trainings on any updated program software, and technology for all library technicians such as Microsoft Excel, Microsoft Word, Microsoft Access, Microsoft Power Point, Web-Page browser, How to Write a Resume utilizing the templates, and How to Do a Book Report.

GPLS will schedule internet training workshops monthly for both staff and patrons to ensure enhancement of their skills and knowledge. Administration will explore opportunities for library technicians to attend regional trainings and conferences held off-island. These opportunities will allow library technicians to share and network with other public librarians within the inter-continental region, expanding ideas that Guam may prosper from.

The GPLS plan includes an assessment of the telecommunications services, hardware, software, and other services that will be needed to improve library services offered at each branch. See attached Appendix A, *GPLS USAC Technology Plan – Functional*.

PROJECTION:

<b>EQUIPMENT</b>	<b>2007-08</b>	<b>2008 –09</b>	<b>2009-2010</b>
Computers	50 public / 30 staff	50 public / 30 staff	50 public / 30 staff
Laptops for training	22	22	22
Online Catalog	6	7	7
Library Automation	Horizon 7.3.4	Horizon updates as developed	Updates as developed
Printers PC Management	A) Xerox 2636 networked for Admin. HP Laser Jet 4100 Secondary B) HP Laser jet 2300 networked to Circulation and Public computers for 1 <sup>st</sup> Floor Business Ink-Jet 2250 networked to 1 <sup>st</sup> Floor Circulation and Public computers C) Xerox Docu Center 1632 networked for 2 <sup>nd</sup> Floor Reference and Patron use	A) Xerox 2636 networked for Admin. HP Laser Jet 4100 Secondary B) HP Laser jet 2300 networked to Circulation and Public computers for 1 <sup>st</sup> Floor Business Ink-Jet 2250 networked to 1 <sup>st</sup> Floor Circulation and Public computers C) Xerox Docu Center 1632 networked for 2 <sup>nd</sup> Floor Reference and Patron use	A) Xerox 2636 networked for Admin. HP Laser Jet 4100 Secondary B) HP Laser jet 2300 networked to Circulation and Public computers for 1 <sup>st</sup> Floor Business Ink-Jet 2250 networked to 1 <sup>st</sup> Floor Circulation and Public computers C) Xerox Docu Center 1632 networked for 2 <sup>nd</sup> Floor Reference and Patron use
Computer	Print management server	Print management server	Print management server(s)
Vendor Console – Console is currently out of service	Self print/pay Library staff at desk	Self print/pay Library staff at desk	Self print/pay Library staff at desk
Phone Lines	18	21	21

<b>TELECOMMUNICATIONS</b>	<b>2007-08</b>	<b>2008 –09</b>	<b>2009-2010</b>
Fax machine	1 Admin/5 at branches	1 Admin/5 at branches	1 Admin/5 at branches
<u>Phones</u> –Nortel Meridian	18	New phone system 21	New phone system

TDD text phone	1	6	6
Internet Access	T-1 or greater	T-1 or greater	T-1 or greater
Telecommunications Equipment	Routers, hubs, terminating equipment (TBLC)	Routers, hubs, terminating equipment (TBLC)	Routers, hubs, terminating equipment (TBLC)
Hub	1 Wireless w/ 2 active ports	WIFI researched for possible implementation	

## VII. Budget Technology Upgrades

The Guam Public Library System intends to use the Universal Service discounts for the following services and equipment:

- Purchase and installation of telecommunications services: (or continue monthly charges for twenty-eight local and long distance telephone service)
- Purchase and installation of Internet

Internet connectivity

Internet access fee

Continue monthly Internet connectivity charges

- Purchase and installation of eligible internal connections equipment; internal wiring, a portion of a network file server, hubs, CSU/DSU, router
- Currently, the Department of Administration – Data Division Information Systems Department follows a three year replacement cycle for all library computers.
- Software is replaced concurrently with licensing renewals and those renewals are budgeted annually pending availability of funding.
- Technology training directed toward staff functions and roles will be provided to staff and will include software applications, new technologies, instructor training, and available related conferences.

### PROJECTION:

<b>Telecommunications</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-2010</b>	<b>3 Year Totals</b>
*Phone/Fax/DSL/ISDN Lines/Routers/Long Distance	31,000.00	31,000.00	31,000.00	
*NISS (CIPA)	29,444.50	29,444.50	29,444.50	
*Internet/Maintenance Services	3,141.00	3,141.00	3,141.00	
*Horizon	17,024.88	17,024.88	17,024.88	

System/Maintenance				
** TDD Text phone	0.00			
** Fire Wall	10,967.11	10,967.11	10,967.11	
**Fire Wall Managed Services	5,596.92			
**Fire Wall Maintenance	1,258.60			
**Base Radio Stations & handheld units	0.00			

\* Budgeted for Fiscal Year 2008 \*\* Non-Budgeted Item

### VIII. Evaluation Process

The Guam Public Library System (GPLS) will continue to monitor its progress of the ongoing process of all projects. The effectiveness of library technology service will be monitored through use counts; number of patrons using services, attending classes, and from statistical reports such as SirsiDynix Horizon software. Assessment of local services and products / technologies will be conducted to evaluate relevance of services to patron needs. Continual monitoring of the library's telecommunications usage and equipment functionality will take place on a regular basis in addition to updates to our technology plan.

As stated all technology will be evaluated and updated wherever possible. Attention will be given to assess levels of service and service issues. Communications with the DOA - DD Information Systems Department will be utilized to make relevant technology choices for the library. Community use patterns, as well as staff suggestions, will also be part of the decision-making matrix as we formulate those choices.

The success of implementing this technology plan for the Guam Public Library System will be judged on the ability of the library to meet the objectives and time lines set forth in this plan. The plan will be reassessed each year at the GPLS (monthly) Board of Directors meetings to evaluate progress and modify objectives as necessary.

An evaluation of meeting the goals and strategies set forth in this plan will be assessed at the GPLS (monthly) board meetings. Success will be measured on the increased use of patron's computers and increased use of online services. Data collected on usage will be discussed at the GPLS board meeting.

An evaluation of meeting technology goals will be assessed by library staff and reported to the library board at the GPLS (monthly) board meetings. Input will be collected to judge whether new and current technologies did improve library services during the year. Success will be measured by 2010 by evaluating the following:

- Increase in number of people served
- Satisfaction with services provided
- Increase in service

IX. Authorized Signatures

**APPROVED:**



**SHIRLEY "SAM" MABINI SOUZA**  
Acting Director  
Guam Public Library System

DATE: 10-12-07

**CONCUR:**



**GINA B. WUSSTIG**  
Board Chairperson  
Guam Public Library System

DATE: 10-12-07