

# JOETEN-KIYU PUBLIC LIBRARY NORTHERN MARIANAS STATE LIBRARY



## EVALUATION OF THE LSTA FIVE-YEAR PLAN FOR THE JOETEN KIYU PUBLIC LIBRARY SYSTEM 2013–2017

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#### I. Evaluation Summary

#### **Background**

This document is an evaluation of the implementation of the 2013-2017 five-year Library Services and Technology Act (LSTA) Plan for the Commonwealth of the Northern Mariana Islands (CNMI) State Library System. The Institute of Museum and Library Services (IMLS) is the federal agency responsible for implementing the LSTA, which distributes federal funds to each of the U.S. states and territories. The IMLS' authorizing legislation requires LSTA fund recipients to conduct an independent evaluation of each five-year plan period for programs funded.

The CNMI State Library System is the State Library Administrative Agency (SLAA) that manages the LSTA Program for CNMI. The system is composed of three library branches: the main library, Joeten Kiyu Public Library (JKPL), is located on Sa'ipan, the Antonio C. Atalig Memorial Public Library is located on Rota, and the Tini'an Municipal Public Library is on Tini'an. The CNMI State Library System is interchangeably referred to as "JKPL" in this report.

JKPL serves as the sole public library system of CNMI, serving a population of roughly 53,000 people on three islands. The library has 13 staff members spread across the three locations, though the majority are located on Sa'ipan. Library materials are transferred between islands by airplane when patrons request InterLibrary Loan services. The library reports to a Library Council Board, which in turn reports to the CNMI Governor, Mr. Ralph DLG. Torres. Federal LSTA funds are used to pay for some staff salaries, staff continuing education, software, and technology.

JKPL contracted with Joyce Chapman, an external consultant, to perform the evaluation of the five-year plan for 2013-2017. The consultant has no prior affiliation or relationship with the library or any staff member of the library. The evaluation was conducted in accordance with the guidelines distributed by the IMLS to SLAAs, which provide a reporting framework for each SLAA to follow including questions about retrospective assessments, process assessments, and methodology.

#### Retrospective questions

Retrospective question A-1 asks the extent to which five-year plan activities made progress towards goals. As detailed below, CNMI made excellent progress towards all five of its goals over the past five-year cycle.

Goal #1: All CNMI Public Libraries will have up-to-date online public computer access to all cataloged library collections for all 3 branches by 2016

CNMI performed excellently in meeting components of this goal. The Horizon Library Search became accessible online, linking all three libraries' OPACs and enabling online search of all CNMI library collections. The only area in which there was difficulty was the target of providing an online reservation system for materials. While a system is in place allowing patrons to reserve books online, the system will only be able to go live if the library can acquire a faster Internet connection. No faster connection is currently available in CNMI due to its remote geographic location.

Goal #2: All CNMI Public Libraries will offer and provide e-books as an expanded digital collections resource to augment existing physical collections

The library successfully acquired e-book subscriptions, providing more than 5,000 e-books to patrons through their library card memberships. Staff train patrons in the use of devices for accessing e-books, and computer facilities and wireless connectivity are in place at each library location enabling patron access to e-books. Goals related to the number of available computers in each facility saw initial setbacks but were eventually completed during the five-year period. No data was collected that could specifically measure change in patron knowledge and skills around requesting e-books; however, the 2016 patron survey shows that patrons enjoy the e-book technology. Of those who are aware of the service at the main library, 37% rate it as excellent, 34% as good, 20% as fair, and only 9% as poor. Of those who had an opinion, 70% said e-book services are very important or important to them.

Goal #3: Opportunities for professional development of library staff in the 3 public libraries will be developed and provided in order to more effectively and efficiently serve current and future patrons

The library developed and implemented a systematic training program in the use of the Horizon server, and key staff members at each library completed at least one training on the Horizon Library Systems software by 2015. JKPL also developed various programs for both staff and the public around computer literacy. All staff were trained in the use of e-book-enabled devices. Some difficulty arose around measuring outcome targets for this goal. Data was not systematically gathered that would allow staff to evaluate outcome measures, and two measures were unable to be evaluated at all due to missing data.

Goal #4: All CNMI public libraries will continue to provide valued added technology services by offering comprehensive community digital literacy programs and classes at all public library branches

JKPL successfully developed a training program to teach patrons the basic use of computers, the Internet, Internet proficiency and safety, and the use of Microsoft Office applications. Typhoon Soudelor had some impact on the library's ability to complete certain targets, but overall, much success was achieved. Once again, there was difficulty around the measurement of outcome targets due to missing data. A questionnaire provided to one computer class showed that at the end of week three, two-thirds of participants felt confident using the Internet for personal and private business. According to the main library's 2016 patron survey, the Information Technology Center (ITC) and library technology are a large reason many patrons come to the library: 39% of respondents come to the library for free wifi, 30% come to use free computers with Internet access, 41% come to the library to obtain school-related information, 43% because it provides space to work, 13% to get information related to finding a job, and many others for entertainment and recreational purposes that involve the ITCs.

Goal #5: Expansion and upgrade of the State Library and branch libraries' computer technologies and services towards a more reliable, robust, and integrated network to more efficiently and effectively promote and expand community digital literacy, in addition to leveraging its ITC facilities for use by key educational stakeholders and partners.

The library updated technology infrastructure and acquired economical and environmentally friendly equipment by installing virtual thin client computers with open source software at all library branches. Wireless Internet was also successfully installed at each library. The library was not able to acquire web and mail servers that meet the online requirements for library public access due to high cost and the

monopoly currently held by the sole Internet provider on CNMI. In partnership with the Public School System (PSS), an additional switch was set up to accommodate public school students year round. While the target of providing access to e-book enabled devices at each library was delayed by the typhoon, this target is close to completion now, awaiting only the finalization of policies for device use and management.

In terms of outcome targets, the library successfully lowered energy use, but the benefits were neutralized by rising utility costs. Use of the wireless Internet did increase over the three years it has been available, but completion of the remaining two targets was difficult to assess due to missing data.

#### Additional retrospective questions

Question A-2 asks the extent to which funds were spent on the Measuring Success focal areas.1 LSTA funds have been spent over the past five-year cycle in direct relation to all Measuring Success focal areas other than human services, civic engagement, and economic and employment development. In terms of lifelong learning, goal 4 achieved results related to increasing general knowledge and skills by offering comprehensive community digital literacy programs and classes. Basic computing, Internet safety, digital literacy, and software classes were developed and taught during this cycle. Goal 3 related to lifelong learning as well by training staff in computer literacy so that they could better assist patrons. Information Access was addressed with goals 1, 3 and 4, the results of which related to increasing ability to discover, obtain, and use information resources. Goal 1 provided online access to a shared catalog. Goal 3 resulted in a staff better trained in using the Horizon server to assist patrons, and with improved computer literacies skills that in turn improved staff's ability to help patrons access information. Goal 4 focused on providing classes and training to users, including training users to discover, obtain, and use information resources. In terms of institutional capacity, Goal 3 focused on staff continuing education, worked toward improving the library's workforce and operations. The library's technology infrastructure was improved via goals 1, 4, and 5 by providing a linked online OPAC, installing virtual machines at all locations, expanding and upgrading computer technologies and services, and subscribing to an e-book service.

Question A-3 asks SLAAs to identify areas that were of substantial focus during the five-year plan. While funds are not funneled directly to programs targeted patrons of ethnic minorities or lower socio-economic backgrounds, almost all library patrons are individuals living below the poverty line: 44% of households in CNMI fall into this category. According to the 2016 patron survey, 61% of visitors at the main library have an annual household income of less than \$20,000. Additionally, virtually all residents of CNMI are part of ethnic/minority populations, as defined by the IMLS. According to the 2016 library patron survey, 56% of patrons at the main library are students, and most programming also targets this age group. The library does not have a way to identify the percentage of its LSTA budget that directly goes to serving this population, but believes it to be more than 10%. Lastly, the library spends more than 10% of LSTA funds on the library workforce. Over the five-year period, 46% of LSTA funds were spent on staff salaries and benefits, while an additional 5% of the funds went to professional development opportunities for staff.

<sup>1</sup> See a list of the Measuring Success Focal Areas in Appendix A

#### **Process questions**

B-1 asks how libraries have used data from State Program Reports (SPRs) to guide activities included in the five-year plan. JKPL just recently learned how to access the SPR and submitted its first report last December. JKPL has not used data from either the old or new SPR to guide activities included in the five-year plan.

B-2 asks whether changes were made to the five-year plan; only a slight modification to the e-book training plan was made.

B-3 asks how libraries have shared data from SPRs. JKPL has not shared data from the old or new SPR. JKPL shared other sources of evaluation data with the independent evaluator who conducted the five-year plan evaluation.

#### Methodology

C-1 addresses the selection of an independent evaluator. CNMI, Guam, and American Samoa shared information to assist one another in recommendations for an evaluator for the 2012-2017 five-year plan. CNMI put out an RFP and selected an evaluator from the resulting submissions.

C-2 explores evaluation methods. The evaluation process relied on interviews with staff, existing administrative documents, and existing data that had been collected over the course of the five-year period. During preliminary interviews with staff, the evaluator identified documents and data that would be required, and these were located and delivered by staff as quickly as possible. The evaluator reviewed documents and analyzed data to determine the extent to which program targets, target outputs, and target outcomes had been met. Analysis of documents and data was augmented by interviews with staff via Skype and frequent email contact.

C-3 examines stakeholder engagement. Three stakeholders from JKPL worked directly with the evaluator: the Acting Library Director, the Computer Programmer, and the Computer Specialist II. The evaluator met with stakeholders via Skype in a series of meetings, each dedicated to one of the goals of the five-year plan. Stakeholders beyond library staff were not involved in the evaluation process directly, though results of patron surveys and questionnaires are part of the evaluation.

C-4 asks how the evaluation report will be shared. JKPL plans to use the final evaluation report to help improve services provided by the library, if needed. Staff will share the report with stakeholders and Library Council Board members. Additionally, JKPL plans to make the report available for patrons.

#### Lessons learned & recommendations

- 1. Limit repetition of the same goals among different targets.
- 2. Some output targets are not true outputs, which require countable or measurable targets. In the next five-year plan, format outputs as such. Otherwise, list the goals as programs.
- 3. Some outcomes are not true outcomes. Outcomes measure a change in skill level, knowledge, attitude, or behavior. Measuring outcomes tends to require two points of data collection: before and after. Be careful to develop true outcome measures for the next five-year plan, and to collect data that can measure these outcomes.

- 4. At the beginning of the five-year period, map out all the evaluation that must be undertaken to complete the new plan, and set up data tracking mechanisms from day one. Much of the data needed at the end of the five-year cycle cannot be acquired retrospectively.
- 5. Consider revising data collection workflows to make sure all data desired for decision-making by management is being collected consistently over time.

#### II. Body of the report

#### Background

The LSTA is administered by the IMLS and provides federal funding to SLAAs to support statewide library initiatives and services. SLAAs develop a five-year plan for how the funds will be used, how use aligns with LSTA purposes and priorities and the library's goals, and how success will be evaluated at the end of the five-year period. At the end of the five-year period, SLAAs must partner with an independent evaluator to conduct an evaluation assessing their success in meeting the program goals, target outputs, and target outcomes in the plan.

JKPL is the SLAA of CNMI. The library system has a central facility on Sa'ipan and two branch locations on the islands of Rota and Tini'an. LSTA funds are used primary to support the library's technology infrastructure and staff continuing education. JKPL worked with Joyce Chapman, an independent consultant, to conduct the 2013-2017 five-year plan evaluation. This evaluation was completed in accordance with guidelines distributed by the IMLS to JKPL. The guidelines provide a reporting framework that includes questions about retrospective assessments, process assessments, and methodology. Due to monetary constraints and geographic distance, the evaluator (located on the eastern coast of the United States) was not able to physically visit CNMI. Interviews with staff were conducted via Skype from December through February. Data and other administrative files were shared via Google Drive. Email was used for other frequent communications.

The primary audiences intended for this report are the IMLS, who use the reports to understand trends and inform policy at the federal level; JKPL, who will use the report as a tool in authoring the next five-year plan; and the citizens of CNMI, who may use the report to better understand how the territory's LSTA funds are used. The report will be made publically available on the IMLS' website, and JKPL is free to distribute or make the report public in any other way desired.

#### The Commonwealth of the Northern Mariana Islands

The evaluation of JKPL' five-year plan is guided by needs and realities in CNMII that are quite different from those experienced on the continental United States. Since 1976, CNMI has been a commonwealth of the United States. CNMI is part of the Census Bureau's "Island Areas" alongside Guam, the US Virgin Islands, and American Samoa. It is comprised of 14 islands in the North Pacific Ocean, roughly three-quarters of the way between Hawaii and the Philippines. The total land area is 179 square miles, and the islands are particularly vulnerable to typhoons. As a commonwealth of the United States, CNMI is an unincorporated dependent territory.2

<sup>2</sup> https://www.cia.gov/library/publications/the-world-factbook/geos/cq.html

As of 2016, the estimated population of CNMI is 53,467, the vast majority of whom (around 49,000) live in the capital city of Sa'ipan, on the island of the same name. A 2010 Census Bureau estimate puts the ethnic population of CNMI at 50% Asian, 35% Native Hawaiian or other Pacific Islander, and 13% two or more other ethnicities or races. Only 17% of the population speak English as a first language, while a third speak Philippine languages, a quarter speak Chamorro, 10% speak other Pacific Island languages, and 7% speak Chinese as a first language.<sup>3</sup>

As of data last collected in 2009, 44% of all households earn below the poverty level; this number increases to 57% of households with children under five year old. Only 15% of adults have a bachelor's degree, while 18% never completed high school or its equivalency. Forty percent of the working population does not have full time work4 and a third of the population has no health insurance.5

#### **Typhoon Soudelor**

In August 2015, a major natural disaster struck Sa'ipan. Typhoon Soudelor was a category four storm, and the worst typhoon to make landfall on the island in three decades. It caused serious material damage and prolonged loss of running water and electricity across the island, including at the library. Some aspects of the JKPL's five-year plan were set back by this natural disaster, referenced throughout the report. The library was closed from August 4 to November 12, 2015.

#### Notes on data

JKPL was unable to access a number of documents and data from 2013-2015 that would have been helpful to the evaluation process. This was due to a the departure of the former Executive Director that resulted in the deletion of a number of library files as well as missing information, such as passwords, needed to access other files.

#### Retrospective questions

This report contains a retrospective assessment of each of the five-year plan's five goals and its corresponding program components, output targets, and outcome targets. Below is an assessment of the progress made to date towards these targets. For each goal, the corresponding LSTA purposes or priorities are listed, a table showing whether the targets were met followed by a narrative explanation of progress made toward each target. A discussion of lessons learned from evaluation of the current plan, along with recommendations for the forthcoming plan, can be found at the end.

The five-year plan consists of five targeted goals that address six of the LSTA priorities, as shown in the table below. This section explores the degree to which programs, output targets, and outcome targets were met over the five-year period.

<sup>3</sup> https://www.cia.gov/library/publications/the-world-factbook/geos/cq.html

<sup>&</sup>lt;sup>4</sup> This is defined as working fewer than 35 hours per week.

<sup>5</sup> http://www2.census.gov/census 2010/10-

Island Areas Detailed Cross Tabulations/CNMI/CNMI 2010 Census Detailed Crosstabulations Part1 v3.xlsx

Table 1. Five-year plan goals and related LSTA priorities

Goal	LSTA Purpose <sub>6</sub>
Goal #1: All CNMI Public Libraries will have up-to-date online public	#4 and #8
computer access to all cataloged library collections for all 3 branches by	
2016	
Goal #2: All CNMI Public Libraries will offer and provide e-books as an	#3
expanded digital collections resource to augment existing physical	
collections.	
Goal #3: Opportunities for professional development of library staff in	#6
the 3 public libraries will be developed and provided in order to more	
effectively and efficiently serve current and future patrons.	
Goal #4: All CNMI public libraries will continue to provide valued added	#5
technology services by offering comprehensive community digital literacy	
programs and classes at all public library branches	
Goal #5: Expansion and upgrade of the State Library and branch libraries'	#2 and #4
computer technologies and services towards a more reliable, robust, and	
integrated network to more efficiently and effectively promote and	
expand community digital literacy, in addition to leveraging its ITC	
facilities for use by key educational stakeholders and partners.	

A-1. To what extent did your Five-Year Plan activities make progress towards each goal?

Goal #1: All CNMI Public Libraries will have up-to-date online public computer access to all cataloged library collections for all 3 branches by 2016.

This goal relates to LSTA Purpose #8: to enhance the role of libraries within the information infrastructure of the United States in order to support research, education, and innovation; and Purpose #4: to encourage resource sharing among all types of libraries for the purpose of achieving economical and efficient delivery of library services to the public.

Programs	Incomplete/unable to assess	Somewhat complete	Complete
The state library will procure the equipment and services to enable the Horizon Library Search to be accessible online, linked via each respective library's homepage. <i>Time Frame:</i> Continually 2013-2017			Х
Output Targets	Incomplete/unable to assess	Somewhat complete	Complete
The Joeten-Kiyu Public Library will set up a web-based service for library public access by 2017, utilizing the current connectivity with Rota Public Library and the Tini'an Public Library; JKPL's Horizon server will hold all library materials and records and is the central access point, which will enable online search of all CNMI library collections.			Х

<sup>6</sup> A reference page of LSTA Priorities can be found in Appendix A

Outcome Targets	Incomplete/unable to assess	Somewhat complete	Complete
Over 30,000 users on Sa'ipan, 4,000 in Tini'an, and 4,000 in Rota will have access to all 3 library collections with more selection and awareness of the collections available on all 3 islands.			Х
Library patrons will be able to access bibliographic records for their neighboring island's library materials.			Х
Library patrons will be able to find and reserve a book online before driving or walking to the library to get it.		Х	

#### **Programs**

The state library will procure the equipment and services to enable the Horizon Library Search to be accessible online, linked via each respective library's homepage. Time Frame: Continually 2013-2017

Prior to the current five-year period, only the main library had an in-house online catalog, while the other two branches ran on manual cataloging and circulation. The libraries did not all have access to high speed Internet; from 2008 to 2016 the fastest connection in any library was 5MBits. In 2016, the library achieved a goal of acquiring DSL 9.0MBits Internet connectivity in all three branches, which is now has one of the fastest connections in CNMI. In 2016 the library also met the goal of providing a single online catalog. Within the catalog interface, patrons may choose to search materials at their branch location, or at all three libraries.

#### **Target Outputs**

The Joeten-Kiyu Public Library will set up a web-based service for library public access by 2017, utilizing the current connectivity with Rota Public Library and the Tini'an Public Library; JKPL's Horizon server will hold all library materials and records and is the central access point, which will enable online search of all CNMI library collections.

Prior to the current five-year plan, the Sa'ipan and Tini'an OPACs were already connected, and this target was met in full in 2016. Over time, JKPL has had difficulty meeting these kinds of goals due to constant turnover in supervisory positions. This turnover has historically been due to the fact that supervisory staff (who are the only library staff at the two smaller library branches) were classified as government officials and were thus replaced every four years when a new mayor was elected. Over the past five-year period, the main library has had to train three new supervisors for the two branches. Due to this instability, in 2015 the CNMI State Library Management lobbied for and was granted two fulltime library employees, one at each branch. JKPL has since been able to train and retain staff stationed on each island, leading in part to the success in online automaton system connectivity.

#### **Target Outcomes**

Over 30,000 users on Sa'ipan, 4,000 in Tini'an, and 4,000 in Rota will have access to all 3 library collections with more selection and awareness of the collections available on all 3 islands.

In 2016, populations on the three islands gained access to view and search all three library collections online. This expanded the selection ability and collection awareness of the populations of Tini'an and Rota tremendously, as the majority of library materials are housed in the library on Sa'ipan.

Library patrons will be able to access bibliographic records for their neighboring island's library materials.

As of 2016, library patrons are now able to access the bibliographic records of materials located on their neighboring islands. The process took longer than expected. The Tini'an library began by partnering with the Northern Marianas College (NMC) campus on Tini'an to access the Internet via their server. While the Tini'an branch library was able to share an online catalog with the main Sa'ipan library in this manner, the extra burden caused problems for the college's network.

Library patrons will be able to find and reserve a book online before driving or walking to the library to get it.

The library has partially completed this program and is unable to proceed further at this time due to Internet infrastructure limitations across CNMI. While a system is in place allowing patrons to reserve books online, the latest testing in June of 2013 showed that if more than one person attempts to reserve a book online simultaneously, the entire OPAC and network are slowed. At this time, there is only one Internet provider on CNMI and the library already has the fastest available connection of 9Mbits. Library staff believe that next year at least one more Internet provider plans to come to CNMI from Guam, providing much needed competition and the option for a faster connection. The online reservation system will only be able to go live if the library can acquire a faster Internet connection.

## Goal #2: All CNMI Public Libraries will offer and provide e-books as an expanded digital collections resource to augment existing physical collections.

This goal related to LSTA Purpose #3: to facilitate access to resources in all types of libraries for the purpose of cultivating an educated and informed citizenry.

Programs	Incomplete/unable to assess	Somewhat complete	Complete
The State Library will acquire an E-book subscription service and provide access to the Rota and Tini'an Public Libraries for access by respective community patrons through their library card membership. Time Frame: Continually 2013-2017			х
Training in the use of devices for E-books and access in the respective computer facilities of each library will be done to ensure optimal use of the E-Book services. Time Frame: Continually 2013-2017			Х
Output Targets	Incomplete/unable to assess	Somewhat complete	Complete
Existing computer facilities in each library, including wireless connectivity to be in place at each library, will enable patrons to access ebooks by 2014.		Х	
Wireless devices and tools such as Wi-Fi enabled computer tablets and cellular smartphones will be able to make use of these digital services within each library facility by 2016.			Х

20 computers at the JKPL, 12 computers at Tini'an Public Library, and 6 computers at Rota Public Library will be used to access additional resources in the form of e-books by 2014.		X	
Additional internet ready workstations will be made available as space permits in each public library branch - 5 at Rota Public Library, 10 at Tini'an Public Library, and 30 at Joeten-Kiyu Public Library - to accommodate additional users as necessary by 2017.			Х
Outcome Targets	Incomplete/unable to assess	Somewhat complete	Complete
Over 30,000 users on Sa'ipan, 4,000 in Tini'an, and 4,000 in Rota will have access to the e-book subscriptions; more selection and awareness of the collections will be available online. Patrons will have a larger library collection and reading material to choose from.			Х
Patrons will enjoy the convenience of new technology and to learn how it allows for ease of use in requesting and gaining new material online in an instant without waiting in line.		х	

#### **Programs**

The state library will acquire an E-book subscription service and provide access to the Rota and Tini'an Public Libraries for access by respective community patrons through their library card membership. Time Frame: Continually 2013-2017.

All three libraries launched an e-book service for patrons in 2016, using two e-book providers. An Axis 360 e-book collection was made available in March of 2016, and a public domain collection, Free E-books, was made available in May 2016. Patrons now have access to over 5,000 e-books.

Training in the use of devices for E-books and access in the respective computer facilities of each library will be done to ensure optimal use of the E-Book services. Time Frame: Continually 2013-2017.

JKPL staff train patrons in-person or over the phone on an as-needed basis. The library has not tracked the number of requests they have fulfilled for such assistance. Because each of the e-book subscription services has its own website containing help documents, many patrons use these resources directly and do not need training from the library.

#### **Output targets**

Existing computer facilities in each library, including wireless connectivity to be in place at each library, will enable patrons to access e-books by 2014.

While wireless connectivity was in place at each library by 2014, e-books were not available to the public until 2016. The library began to implement this program early in the five-year period, but substantial delays were caused in 2015 by typhoon Soudelor, as well as an unrelated island-wide network outage caused by a break of the islands' only fiber optic cable connecting Sa'ipan to the world in July 2015.

Wireless devices and tools such as Wi-Fi enabled computer tablets and cellular smartphones will be able to make use of these digital services within each library facility by 2016.

All three library facilities had wireless Internet in place by 2014. Wireless devices and tools were able to make use of digital services within each library ahead of schedule.

20 computers at the JKPL, 12 computers at Tini'an Public Library, and 6 computers at Rota Public Library will be used to access additional resources in the form of e-books by 2014.

The e-book implementation portion of this goal was delayed (see above). Currently, the main library has 30 computers, which exceeds the original goal. Tini'an has six computers instead of the 12 expected, and Rota has six computers, as planned.

Additional internet ready workstations will be made available as space permits in each public library branch - 5 at Rota Public Library, 10 at Tini'an Public Library, and 30 at Joeten-Kiyu Public Library - to accommodate additional users as necessary by 2017.

While Tini'an has fewer computers than hoped for, this goal has otherwise been met.

#### **Outcome targets**

Over 30,000 users on Sa'ipan, 4,000 in Tini'an, and 4,000 in Rota will have access to the e-book subscriptions; more selection and awareness of the collections will be available online. Patrons will have a larger library collection and reading material to choose from.

All patrons now have access to over 5,000 e-books. Patrons also have a larger library collection to choose from due to the addition of e-books to other existing materials.

Patrons will enjoy the convenience of new technology and to learn how it allows for ease of use in requesting and gaining new material online in an instant without waiting in line.

The 2016 patron survey shows that patrons enjoy the e-book technology, and it is important to many of them. While 33% of patrons at the main library are unaware of the e-book service, of those who are aware of the service 37% rate it as excellent, 34% as good, 20% as fair, and only 9% as poor. Of those who had an opinion, 26% said e-book services are very important to them and 44% said the service is important. Only 7% said the service is not at all important. No data was collected that would allow for the evaluation of this outcome target in terms of measuring a change in knowledge or skills around requesting books via the new technology. The second half of the outcome is therefore unable to be measured.

Goal #3: Opportunities for professional development of library staff in the 3 public libraries will be developed and provided in order to more effectively and efficiently serve current and future patrons.

This goal relates to LSTA Purpose #6, to enhance the skills of the current library workforce and to recruit future professionals to the field of library and information services.

Incomplete/unable to assess	Somewhat complete	Complete
		Х
		Somewhat complete

Time Frame: Continually 2013-2017			
Develop a measurable program for computer			
literacy ranging from Basic Computing to			
Specific Office Application Software. <i>Time</i>			X
Frame: Continually 2013-2017			
Set up weekly or monthly workshops for the			
use of e-books and Horizon Online Web Search			Х
for patrons. Time Frame: Continually 2013-2017			
	Incomplete/unable		
Output Targets	to assess	Somewhat complete	Complete
Key staff members at each library will complete			
at least one training on the Horizon Library			
Systems software by 2015, after complete			X
connectivity to all public library branches is			
established.			
All staff at each library will be trained in			Х
creating a computer literacy class by 2016.			^
All staff at each library will be trained in the use			Х
of e-book enabled devices by 2015.			^
Outcome Targets	Incomplete/unable to assess	Somewhat complete	Complete
Library services to the community will be			
improved with the use of new technology as			
opposed to their previous method of manual			
checkout. Each library's staff will avail of the			X
automated access to the other library			
collections through the use of Horizon and the			
collections through the use of Horizon and the centralized database of each library.			
centralized database of each library.  Library staff assigned to operate their			
centralized database of each library.  Library staff assigned to operate their respective Information Technology Centers will			
centralized database of each library.  Library staff assigned to operate their respective Information Technology Centers will be able to provide computer literacy training			
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In addition to completing targets in the five-year plan, one staff member additionally completed the Information Technology Industry & Association (TIA) Certification using LSTA funds.

#### **Programs**

Develop & implement a systematic training program in the use of the Horizon server. Time Frame: Continually 2013-2017

The library developed a training program on the Horizon server that was used with staff in March and April of FY2016. This three-day class included circulation basics, introduction to cataloging, and outreach activities training.

Develop a measurable program for computer literacy ranging from Basic Computing to Specific Office Application Software. Time Frame: Continually 2013-2017

The interpretation of the term "measurable" in the original wording of this program is unclear to staff today, who were not present when the five-year plan was authored. The library has developed and offered various programs around computer literacy since 2013, including a regular Saturday class for the community in the basics of computing, programs during the summer training students in research using EBSCOhost and other reference databases, a summer class called "the Dos and Don'ts of Computer Etiquette," and an advanced Saturday class for school-aged students. The library has not consistently measured statistics such as the number of times classes have been offered and the count of attendees, and also has not measured outcomes such as knowledge gained or changes in confidence, grades, employment, etc.

Set up weekly or monthly workshops for the use of e-books and Horizon Online Web Search for patrons. Time Frame: Continually 2013-2017

The aim of this program has been successfully accomplished, though it was not completed as written in the original five-year plan. Staff have found that point of need training is more helpful to community members than scheduled classes. They successfully offer one-on-one training as needed. When school groups visit the library to learn about resources, the library provides a group demonstration as well.

#### **Output Targets**

Key staff members at each library will complete at least one training on the Horizon Library Systems software by 2015, after complete connectivity to all public library branches is established.

This goal was met. The library developed a training program on the Horizon server for staff and provided the training in March and April FY2016. This three-day class included circulation basics, introduction to cataloging, and outreach activities training.

All staff at each library will be trained in creating a computer literacy class by 2016.

Though unclearly stated in the five-year plan, the intention of this program was not to train staff to create computer literacy classes for the public, but to train staff in computer literacy. These trainings were completed in March of 2016. Each staff member was provided with a one-hour one-on-one training with an IT staff member.

All staff at each library will be trained in the use of e-book enabled devices by 2015.

This program was completed in 2016. The library is currently drafting a Device Use Policy for patrons to check out e-book-enabled devices. Only the main library has such devices onsite at the moment; devices will be distributed to other libraries and lending will begin once the policy is complete. All staff have been trained in how to access and use e-books from any smart device.

#### **Outcome Targets:**

Library services to the community will be improved with the use of new technology as opposed to their previous method of manual checkout. Each library's staff will avail of the automated access to the other library collections through the use of Horizon and the centralized database of each library.

Staff do use the centralized Horizon database now that it is available to them, though there are no records of staff's use of the centralized database of each library. Staff distributed a version of the library's satisfaction survey twice during this five-year period. An analysis of the change in satisfaction levels identifies that in four key areas related to new technology, interest and satisfaction have increased. While there is no data available specifically related to manual versus automated checkout, the data in the tables of Appendix F indicates that library services to the community empowered by technology generally improved, and more people now use the library for these services. One area in which satisfaction fell was e-books, despite the fact that more people report now coming to the library for e-books. There is no clear reason for this change.

Library staff assigned to operate their respective Information Technology Centers will be able to provide computer literacy training for the community, thereby improving the knowledge and confidence of the patrons in using the internet and computers at their library.

On the first day of a month long computer class at the library, all students fill out short questionnaire. In each subsequent week they receive another brief feedback form. A set of forms completed in 2017 was provided to the evaluator. In this sample, when asked if they felt confident using the internet for personal and private business at the end of week three, two-thirds responded that they did. This questionnaire could be modified to collect data that would more directly measure the outcome, and should be distributed more consistently.

Library patrons will experience a more efficient and faster check-in and check-out of books and obtaining assistance in finding materials from the staff.

It is unknown whether or not this outcome target was met, as no data was collected to enable its measurement. In order to evaluate this outcome target, the library would have needed benchmark data on the time it took to check materials in and out prior to their continuing education training, as well as post-training data. Alternatively, the library might have gathered qualitative data from patrons on a survey before and after staff training to measure perceived improvements in efficiency.

Library patrons will experience a more efficient and effective knowledge base from their library service.

It is unknown whether or not this outcome target was met. The original meaning of this target is unclear to staff. Whether it is interpreted to mean that library staff have gained demonstrable knowledge from their training, or whether it duplicates in part the meaning of the above target in relation to changes in efficiency of services provided, the library did not collect data that would allow for the measurement of the outcome target.

Goal #4: All CNMI public libraries will continue to provide valued-added technology services by offering comprehensive community digital literacy programs and classes at all public library branches.

This goal relates to LSTA Purpose #5: to promote literacy, education, and lifelong learning and to enhance and expand the services and resources provided by libraries, including those services and resources related to workforce development, 21<sup>st</sup> century skills, and digital literacy skills.

Programs	Incomplete/unable to assess	Somewhat complete	Complete
Develop a measurable training program to teach patrons in the basic use of computers and the use of internet and office application software for the community. This learning program will cover subjects in the general use of computers and office applications, such as word processing, spreadsheet, PowerPoint presentation, and internet browsing for research or life interest purposes. Time Frame: Continually 2013-2017			Х
Develop a measurable program to teach in the use of Internet proficiency and safety. Time Frame: Continually 2013-2017			Х
Output Targets	Incomplete/unable to assess	Somewhat complete	Complete
Basic computer training program for patrons will be developed by 2015			Х
Internet proficiency and safety-training program for patrons will be developed by 2016.			Х
Assigned staff in each library will provide a computer literacy (learning) program on a weekly basis free to library patrons and organizations, in addition to the best uses of the ITC facility, by 2015.		X	
Outcome Targets	Incomplete/unable to assess	Somewhat complete	Complete
Patrons who participate will develop more confidence in the use of computers and the other technology-enhanced services in each library.	Х		
Patrons participating will be able to use their knowledge and skills they have learned in the program in their work place, school, or at home.			Х
Patrons will enjoy the opportunities of using the ITC for career, educational, and personal entertainment and recreational purposes.		Х	
Patrons will have a greater appreciation of new technology and its integral relation and connection to their public library.	Х		

#### **Programs**

Develop a measurable training program to teach patrons in the basic use of computers and the use of internet and office application software for the community. This learning program will cover subjects in the general use of computers and office applications, such as word processing, spreadsheet, PowerPoint presentation, and internet browsing for research or life interest purposes. Time Frame: Continually 2013-2017.

The library developed various programs around computer literacy and has taught them since 2013, including a regular Saturday class for the community in the basics of computing, programs during the summer training students in research using EBSCOhost and other reference databases, a summer class called "the Dos and Don'ts of Computer Etiquette," and an advanced Saturday class for students. In particular, the library teaches a four-hour program called "Back-2-Basics" that includes instruction in use of the internet and Microsoft Office programs. It is unclear to library staff what the authors of the five-year plan meant by designating this as a "measurable" program. The library has not consistently measured statistics such as the number of times classes have been offered and the count of attendees, or outcomes such as knowledge gained or changes in confidence, grades, employment, etc.

Develop a measurable program to teach in the use of Internet proficiency and safety. Time Frame: Continually 2013-2017

Internet proficiency and safety has been taught during the summer since 2015 in classes targeting schoolchildren. During these courses, a feedback form was completed by students to ensure a method of measuring gains in knowledge. Unfortunately, the staff person who collected feedback has since left the library and did not leave these records where current staff can now locate them.

#### **Output targets**

Basic computer training program for patrons will be developed by 2015

This training was developed in FY2014 and has been offered each year since. The Back-2-Basics curriculum includes working with a keyboard and mouse, and as well as computer terminology.

Internet proficiency and safety-training program for patrons will be developed by 2016.

This course was developed in FY2015, and taught to students in 3<sup>rd</sup> through 12<sup>th</sup> grades during the summers of 2015 and 2016. The library plans to continue teaching the course in the future.

Assigned staff in each library will provide a computer literacy (learning) program on a weekly basis free to library patrons and organizations, in addition to the best uses of the ITC facility, by 2015.

This output could not be met. The Tini'an and Rota branches have only one staff member each, so computer training had to be deprioritized behind basic functions during the five-year period. At the ITC facility at the main library in Sa'ipan, students and community members are taught best use practices in one-on-one sessions when they come to the library. For example, best use they learn include students using the ITC for homework and taking online distance courses, or community members filling out the United States Citizenship and Immigration Services (USCIS) forms or working on their resumes.

#### **Outcome targets**

Patrons who participate will develop more confidence in the use of computers and the other technologyenhanced services in each library.

Pre and post data that would enable the measurement of this outcome target was collected in 2012-2013 via a feedback form; however, this data was lost during staff turnover when a staff member failed to provide access to files and data when leaving library employment. The library began collecting additional data from feedback forms in the Saturday morning training classes in 2017.

Patrons participating will be able to use their knowledge and skills they have learned in the program in their work place, school, or at home.

On the first day of the four-part, month-long computer class at the library, all students fill out short questionnaire. Each week they receive another brief feedback form. One question on the form, "Do you feel confident using the internet for personal and private business," is relevant to measuring this outcome target. A set of forms completed in 2017 was provided to the evaluator. In this sample, it was found that students' goals in taking the class included familiarizing themselves with basic computing skills, applying learning to everyday work, and developing skills that would lead to a new and promising job. At the end of week three, when asked if they felt confident using the internet for personal and private business, two-thirds responded that they now did.

Patrons will enjoy the opportunities of using the ITC for career, educational, and personal entertainment and recreational purposes.

While no data is available about the ITC in particular relation to these issues for patrons, the 2016 patron survey asked respondents their reasons for visiting JKPL. We can assume that responses involving computers relate to the ITCs. The survey found that 39% of respondents come to the main library for free wireless Internet and 30% come to use free computers with Internet access. In terms of relating ITCs to use of the library for career, educational, personal entertainment, and recreational purposes, there is no way to know what percentage of respondents consider the ITCs to be a part of those activities. But in general the survey showed that 41% come to the main library to obtain school-related information, 43% because it provides space to work, 13% to get information related to finding a job, and many others for entertainment and recreational purposes.

Patrons will have a greater appreciation of new technology and its integral relation and connection to their public library.

It is unknown whether or not this outcome target was met. Pre and post data that would enable the measurement of this outcome target was not collected.

 $<sup>{\</sup>ensuremath{^{7}}}$  Respondents could select multiple reasons for attending the library.

Goal #5: Expansion and upgrade of the State Library and branch libraries' computer technologies and services towards a more reliable, robust, and integrated network to more efficiently and effectively promote and expand community digital literacy, in addition to leveraging its ITC facilities for use by key educational stakeholders and partners.

This goal relates to LSTA Purpose #2: to promote continuous improvement in library services in all types of libraries in order to better serve the people of the United States; and LSTA Purpose #4: to encourage resource sharing among all types of libraries for the purpose of achieving economical and efficient delivery of library services to the public.

Programs	Incomplete/unable to assess	Somewhat complete	Complete
Each Public Library branch will obtain through the LSTA Five-Year Plan the requisite equipment and software to enhance and update their existing technology infrastructure. Time Frame: Continually 2013-2015			Х
Acquisition of economical and environmental friendly equipment such as virtual computing and lower cost applications will be implemented for each library. Time Frame: 2013-2014			Х
Acquisition of web servers and mail servers to meet the online requirements for library public access at home or remotely will be implemented. Time Frame: Continually 2013-2017	Х		
Output Targets	Incomplete/unable to assess	Somewhat complete	Complete
Rota Public Library ITC and Tini'an Public Library ITC will be set up with a Virtual Computing System similar to Joeten-Kiyu Public Library by 2015.			Х
Each public library branch will have wireless capability in its ITC facility by 2015.			Х
In partnership with the CNMI Public School System, additional computers and switches will be set up to accommodate public school students year round to take and enroll in online courses at any public library branch by 2015.			Х
Each library will provide at least 5 e-book enabled devices and services in their facility by 2016.		Х	
Outcome Targets	Incomplete/unable to assess	Somewhat complete	Complete
Virtual computing in each public library branch will lower the energy usage and cost of energy consumption in each library.		Х	
Increased users to the computer facility for library patrons with wireless devices.			Х
Students and teachers will be able to use the ITC facilities in their libraries during the summer		Х	

and all year round and have better access with the availability of library materials. Therefore, this strategic partnership increases the numbers of users in each library facility.  Improvement and upgrade of technology		
services and networks at all public libraries will simultaneously support PSS' Technology Plan's goals of expanding vital partnerships designed to increase access to technology for all students/schools. Improving and maintaining an effective educational technology infrastructure will expand access to technology for all students and teachers. More specifically, upgrades will support the development and utilization of electronic networks and digital learning to provide valuable access to students that would not otherwise be available, especially in Rota and Tini'an.	X	

#### **Programs**

Each Public Library branch will obtain through the LSTA Five-Year Plan the requisite equipment and software to enhance and update their existing technology infrastructure. Time Frame: Continually 2013-2015

In 2013 the library learned that they would need to reduce costs – in particular the cost of power – due to mandates from the local government and island-wide governmental budget cuts. The library resourcefully decided to work through budget cuts and simultaneously meet this program goal by installing virtual thin client computers with open source software at all library branches.

Acquisition of economic and environmental friendly equipment such as virtual computing and lower cost applications will be implemented for each library. Time Frame: 2013-2014

This program goal has been met; however, it was completed later than anticipated. Installation was not completed at Rota in November 23, 2016 and at Tini'an January 12, 2017.

Acquisition of web servers and mail servers to meet the online requirements for library public access at home or remotely will be implemented. Time Frame: Continually 2013-2017

The library was not able to meet this program goal due to high cost, even with a reduced rate through the E-rate program. There is currently only one Internet server provider in CNMI. Until more providers come to the islands, the speed offered by the current provider is simply not fast enough to enable web and mail servers that meet these online requirements. The maximum speed available at this time on the island is 9MBits, which the library already has.

#### **Output targets**

Rota Public Library ITC and Tini'an Public Library ITC will be set up with a Virtual Computing System similar to Joeten-Kiyu Public Library by 2015.

The library acquired computers to meet this target earlier than expected, but turnover in staff trained in troubleshooting computer issues resulted in some computers not being available to patrons in 2015. All computers were available to patrons at Rota in November 23, 2016 and at Tini'an January 12, 2017.

Each public library branch will have wireless capability in its ITC facility by 2015

This goal was met early. Each library branch had wireless capability by 2014.

In partnership with the CNMI Public School System, additional computers and switches will be set up to accommodate public school students year round to take and enroll in online courses at any public library branch by 2015.

An additional network switch to allow more computers (such as laptops) was added in 2015 in partnership with the school system. In 2016, the library worked with the schools to provide online courses accessed at the library for students.

Each library will provide at least 5 e-book enabled devices and services in their facility by 2016.

This goal was delayed due to the typhoon in 2015. While e-book-enabled devices have been purchased, they have not yet been distributed to branch libraries or made available to the public because policies for their use and management are still being drafted.

#### **Outcome targets**

Virtual computing in each public library branch will lower the energy usage and cost of energy consumption in each library.

There were mixed results to this program goal. The library transitioned all computers to virtual thin clients and collected meter readings to measure results. While energy consumption decreased, simultaneous rate increases in utility costs from the utility company neutralized savings. Overall, the library reduced their consumption of energy by about 3,000 hours, but was not able to reduce costs compared to prior years. However, they reduced costs from what they would have been without the energy savings.

Increased users to the computer facility for library patrons with wireless devices.

Wireless capabilities were first made available in March 2014. While data is not available for the two smaller branch libraries, data from Sa'ipan shows that wireless usage increased each subsequent year.

Table 2. Uses of wireless Internet in the main library by year

2014	2015	2016
1,374	2,128	2,265
N/A	35% increase	6% increase

Students and teachers will be able to use the ITC facilities in their libraries during the summer and all year round and have better access with the availability of library materials. Therefore, this strategic partnership increases the numbers of users in each library facility.

The library has an established program for teachers to bring classes to the library, as well as established methods to track this usage. Workflows have been implemented allowing students to register for library cards during their visits, and consistent workflows were established for teachers to arrange to bring classes in and use space, wireless Internet, and resources. The library tracks the number of students, the village from which they came, and the number of visits.

Improvement and upgrade of technology services and networks at all public libraries will simultaneously support PSS' Technology Plan's goals of expanding vital partnerships designed to increase access to technology for all students/schools. Improving and maintaining an effective educational technology infrastructure will expand access to technology for all students and teachers. More specifically, upgrades will support the development and utilization of electronic networks and digital learning to provide valuable access to students that would not otherwise be available, especially in Rota and Tini'an.

The goal of expanding vital partnerships that increase access to technology for students has been met through collaboration over the past five-year period between PSS and the public library. JKPL did not plan data collection specifically aimed at evaluating the second half of this target: providing valuable access to technology that would not otherwise have been available to students. However, in the summer virtually all patrons at the library are students, and the library's summer program works with students ages 6-18. One way to attempt to evaluate this is to use summer gate counts. While summer gate counts were on the rise from FY13 to FY14, the libraries were closed for much of the FY15 summer due to typhoon Soudelor. See graph 1 in Appendix E for more details.

A-2. To what extent did your five-year plan activities achieve results that address national priorities associated with the Measuring Success focal areas and their corresponding intents?

**Lifelong learning:** Goal 4 achieved results related to increasing general knowledge and skills by offering comprehensive community digital literacy programs and classes. Basic computing, Internet safety, digital literacy, and software classes were developed and taught during this cycle. Goal 3 related to lifelong learning as well by training staff in computer literacy so that they could better assist patrons. Goals this cycle did not relate to formal education of patrons.

**Information Access:** Goals 1, 3 and 4 achieved results related to increasing ability to discover, obtain, and use information resources. Goal 1 provided online access to a shared catalog, allowing patrons to discover materials located at the library or at other branch libraries from their homes. Goal 3 resulted in a staff better trained in using the Horizon server to assist patrons and with improved computer literacies skills that in turn improved their ability to help patrons access information. Goal 4 focused on providing classes and training to users, including training users to discover, obtain, and use information resources.

**Institutional Capacity:** Goal 3, focused on staff continuing education, worked toward improving the library's workforce and operations. JKPL also improved the library's technology infrastructure via goals 1, 4, and 5 by providing a linked online OPAC, installing virtual machines at all locations, expanding and upgrading computer technologies and services, and subscribing to an e-book service.

**Economic and employment development, Human services, & Civic engagement:** Funds were not spent in direct relation to these national priorities.

A-3. Did any of the following groups represent a substantial focus for your Five-year plan activities?

- ✓ Library workforce (current and future)
- ✓ Individuals living below the poverty line Individuals that are unemployed/underemployed
- ✓ Ethnic or minority populations
   Immigrants/refugees
   Individuals with disabilities
   Individuals with limited functional literacy or information skills
   Families
   Children (0-5)
- ✓ School-aged youth (age 6-17)

JKPL is a small library and the sole public library system -- as well as the SLAA -- of CNMI. The majority of LSTA funds are spent on staff, software, and technology. Almost all library patrons are individuals living below the poverty line in a commonwealth where 44% of households fall into this category. According to the 2016 patron survey, of all patrons at the main library between the ages of 19-64, only 51% are employed in any capacity, 19% are unemployed, and 15% are students. Thirty-nine percent reported that their annual household income is less than \$10,000; 61% report it is less than \$20,000.

Virtually all residents of CNMI are part of ethnic/minority populations, according to definitions of such groups by the IMLS.8 According to the 2016 patron survey, only 3.5% of library users at the main library identify as Caucasian, while 37% are Filipino, 14% are Chinese, and 12% are Korean.

A significant amount of the library's use is by students and school-aged children. Fifty-six percent of survey respondents at the main library in 2016 were students. The library does not have a way to identify the percentage of its LSTA budget that directly goes to serving this population, but believes it to be more than 10%.

Lastly, the library spends significantly more than 10% of LSTA funds on the library workforce. Over the five-year period, 46% of LSTA funds were spent on staff salaries and benefits, while an additional 5% of the funds went to professional development opportunities for staff.

#### **Process questions**

B-1. How have you used data from the old and new State Program Report and elsewhere to guide activities included in the five-year plan?

JKPL just recently learned how to access the SPR and submitted its first report last December. JKPL has not used data from either the old or new SPR to guide activities included in the five-year plan.

<sup>8</sup> Email correspondence from IMLS staff to Sandra Stanley of the Guam Public Library System on February 12, 2017 indicated that the Pacific island populations would fall into the categories of ethnic and minority populations.

B-2. Specify any changes you made to the five-year plan, and why this occurred

Staff made the decision to modify the plan for the goal 3 program to "Set up weekly or monthly workshops for the use of e-books and Horizon Online Web Search for patrons." While monthly trainings are still offered, point of need training has proven to be more effective and is now the standard procedure.

B-3. How and with whom have you shared data from the old and new SPR and from other evaluation resources?

JKPL shares information from the SPR with the CNMI Library Council, the Department of Finance, library staff, the IMLS Grantor, and the independent evaluator. JKPL shared other sources of evaluation data with the independent evaluator.

#### Methodology

C-1. Identify how you implemented an independent evaluation using the criteria described in "Selection of Evaluators."

CNMI, Guam, and American Samoa shared information to assist one another in recommendations for an evaluator for the 2012-2017 five-year plan. CNMI put out an RFP and selected an evaluator from the resulting submissions.

C-2. Describe the types of statistical and qualitative methods (including administrative records) used in conducting the Five-Year Evaluation. Assess their validity and reliability.

The evaluation process relied on interviews with staff, existing administrative documents, and existing data that had been collected over the course of the five-year period. Existing data included financial records, customer satisfaction survey results, gate counts, computer and wireless usage statistics, circulation statistics, and qualitative feedback from computer class questionnaires. Other administrative records reviewed included the organization chart, information about staff hires, electric and water usage bills, the customer satisfaction survey instrument, the professional development training plan, computer training class plans and feedback forms, and the library visit request form.

During discussions with staff, the evaluator identified documents that would be required for evaluation and analysis. Staff worked to locate and delivery these documents via Google Drive shared folder. The evaluator compiled information from documents, analyzed data, and conducted interviews with staff to determine the extent to which program targets, target outputs, and target outcomes had been met. Analysis of documents and data was augmented by interviews with staff via Skype and frequent email contact.

While some data was not available that would have been ideal for analyzing whether target outcomes and outputs were met, the data that was available was reliable and valid.

C-3. Describe the stakeholders involved in the various stages of the evaluation and how you engaged them.

Three stakeholders from JKPL worked directly with the evaluator: the Acting Library Director, the Computer Programmer, and the Computer Specialist II. The evaluator met with stakeholders via Skype in a series of meetings, each dedicated to one of the goals of the five-year plan. After the meetings, the evaluator produced a list of information, data, and documents that would assist in the evaluation process. Stakeholders worked as a group to deliver data and documents via a shared Google drive folder. The staff members involved other staff at the library as needed to find data necessary for the evaluation process. However, the evaluator did not have direct contact with other staff. Stakeholders beyond library staff were not involved in the evaluation process, other than via existing feedback from patrons collected in surveys and questionnaires.

C-4. Discuss how you will share the key findings and recommendations with others.

JKPL will use the final approved evaluation report to help improve services provided by the library, if needed. Staff will share the report with stakeholders and Library Council Board members. Additionally, JKPL plans to make the report available for patrons to view.

#### III. Lessons learned and recommendations

#### Repetition and clarity

In the current five-year plan, there are targets that repeat the same goal in different words. In the new plan, consider limiting repetition as much as possible. For example, goal #1 contains the output target "The Joeten-Kiyu Public Library will set up a web-based service for library public access...JKPL's Horizon server will hold all library materials and records and is the central access point, which will enable online search of all CNMI library collections," as well as the outcomes targets: "Users...will have access to all 3 library collections with more selection and awareness of the collections available on all 3 islands," and "library patrons will be able to access bibliographic records for their neighboring island's library materials." These three targets are almost identical in what they ask the library to achieve, and could be stated as a single target.

#### Setting output and outcome targets

An output tells the measurable story of what an organization does or produces – these are countable targets such as the number of training sessions held or amount of money saved. Outputs are direct products of program activities, usually measured in terms of work accomplished. An outcome measures benefit or change – change in attitudes, behavior, knowledge, skills, or an improved condition or state – for individuals or populations during or after participation in library programming or using library services. Outcome data is used as proof of effectiveness or impact.

<sup>9</sup> http://publiclibrariesonline.org/2014/12/inputs-outputs-and-outcomes-oh-my/

In the 2013-2017 five-year plan, not all targets listed are actually outputs and outcomes. Output targets that are not countable targets include goal #1, goal #2 (the first two), goal #4 (all), and goal #5 (first and third). In total, these represent 57% of all output targets in the plan. Where output targets do not truly measure outputs, many could instead be listed as programs. An example of an output target that could have been written as a program due to a missing measurable component is goal #2, "Existing computer facilities in each library, including wireless connectivity to be in place at each library, will enable patrons to access e-books by 2014." This is a binary achievement, yes or no; a program that the library hopes to implement. An output of the implementation of such a program might be a measurable target such as "100 e-books will circulate by 2015," "the library will see a 10% increase in e-book circulation from the first year to the second," or "the staff will teach a certain number of people how to access e-books by a certain date." In the next five-year plan, be sure that each output is an output and not a target that would be better placed as a program.

Some outcomes in the 2013-2017 five-year plan are not truly outcomes. For example, goal #1 outcome #2, "Library patrons will be able to access bibliographic records for their neighboring island's library materials" does not measure a change in skill level, knowledge, attitude, behavior, etc. It is particularly difficult to gather the data necessary to evaluate outcomes, and doing so typically requires at least two points of data collection: before and after. Baseline data must be collected prior to the experience being measured, and data must again be collected after the experience being measured. For many outcomes there was no pre and post data available, or the outcome itself was not worded to measure change. For example, goal #3 has the outcome "Library staff...will be able to provide computer literacy training for the community, thereby improving the knowledge and confidence of the patrons in using the internet and computers at their library." JKPL has begun collecting before and after data for the computer literacy classes, however, the questionnaires do not directly ask the same questions before and after so that data can be compared, and there is not a question designed specifically to measure whether the student felt their confidence had improved, nor a before and after test of knowledge. While the evaluator was able to use data from the forms to analyze the outcome, it would be better in the future if the measurement tools were designed to collect this kind of data.

#### Planning data collection

At the beginning of the five-year period, be sure to map out all the evaluation that must be undertaken to complete the new plan, and set up data tracking mechanisms from day one. Much of the data needed in 2022 – in particular measurement of outcome baseline data – cannot be acquired retrospectively. In the current evaluation cycle, full sets of data were either not available or were difficult to locate for some areas that could easily be used for data-driven decision making at JKPL (for example, a count of people using the ITCs, the numbers of programs offered, and the numbers of program participants over time). Consider revising data collection workflows to make sure all data desired for decision-making by management is being collected consistently over time.

### IV. Appendices

#### Appendix A. LSTA purposes and priorities & Measuring Success Focal Areas

According to the IMLS website, 10 the LSTA Purposes and Priorities for Grants to States program are as follows. Note that numbering of Purposes and Priorities has been added by the author for clarity's sake in referencing Purposes and Priorities throughout the body of the report.

#### Overall Purposes of LSTA

- 1. Enhance coordination among federal programs that relate to library and information services;
- 2. Promote continuous improvement in library services in all types of libraries in order to better serve the people of the United States;
- 3. Facilitate access to resources in all types of libraries for the purpose of cultivating an educated and informed citizenry;
- 4. Encourage resource sharing among all types of libraries for the purpose of achieving economical and efficient delivery of library services to the public;
- 5. Promote literacy, education, and lifelong learning and to enhance and expand the services and resources provided by libraries, including those services and resources relating to workforce development, 21st century skills, and digital literacy skills;
- 6. Enhance the skills of the current library workforce and to recruit future professionals to the field of library and information services;
- 7. Ensure the preservation of knowledge and library collections in all formats and to enable libraries to serve their communities during disasters;
- 8. Enhance the role of libraries within the information infrastructure of the United States in order to support research, education, and innovation; and
- 9. Promote library services that provide users with access to information through national, state, local, regional, and international collaborations and networks.

#### LSTA-specified Grants to States Priorities

- Expand services for learning and access to information and educational resources in a variety of formats, in all types of libraries, for individuals of all ages in order to support such individuals' needs for education, lifelong learning, workforce development, and digital literacy skills;
- Establish or enhance electronic and other linkages and improved coordination among and between libraries and entities for the purpose of improving the quality of and access to library and information services;
- Provide training and professional development, including continuing education, to enhance the skills of the current library workforce and leadership, and advance the delivery of library and information services;
- 4. Enhance efforts to recruit future professionals to the field of library and information services;
- 5. develop public and private partnerships with other agencies and community-based organizations;
- 6. Target library services to individuals of diverse geographic, cultural, and socioeconomic backgrounds, and to individuals with limited functional literacy or information skills;
- 7. Target library and information services to persons having difficulty using a library and to underserved urban and rural communities, including children (from birth through age 17) from

<sup>10</sup>https://www.imls.gov/grants/grants-state/purposes-and-priorities-lsta

- families with incomes below the poverty line (as defined by the Office of Management and Budget and revised annually in accordance with section 9902(2) of title 42) applicable to a family of the size involved;
- 8. develop library services that provide all users access to information through local, state, regional, national, and international collaborations and networks; and
- 9. carry out other activities consistent with the purposes set forth in section 9121, as described in the SLAA's plan

#### Measuring Success Focal Areas

- Lifelong learning
  - a. Improve users' formal education
  - b. Improve users' general knowledge and skills
- Information access
  - a. Improve users' ability to discover information resources
  - b. Improve users' ability to obtain and/or use information resources
- Institutional capacity
  - a. Improve the library workforce
  - b. Improve the library's physical and technological infrastructure
  - c. Improve library operations
- Economic & employment development
  - a. Improve users' ability to use resources and apply information for employment support
  - b. Improve users' ability to use and apply business resources
- Human services
  - a. Improve users' ability to apply information that furthers their personal, family, or household finances
  - b. Improve users' ability to apply information that furthers their personal or family health or wellness
  - c. Improve users' ability to apply information that furthers their parenting and family skills
- Civil engagement
  - a. Improve users' ability to participate in their community
  - b. Improve users' ability to participate in community conversations around topics of concern

#### Appendix B. Abbreviations and acronyms

CBO Community Based Organization

CNMI Commonwealth of the Northern Mariana Islands

JKPL Joeten Kiyu Public Library (also refers to the entire State Library Administrative Agency)

IMLS Institute for Museum and Library Services

ITC Information Technology Center

LBPH Library for the Blind and Physically Handicapped

LSTA Library Services and Technology Act

NMC Northern Marianas College

OPAC Online Public Access Catalog

PSS Public School System

RFP Request for Proposal

SDC State Data Coordinators

SLAA State Library Administrative Agency

SOP Standard Operating Procedure

USCIS United States Citizenship and Immigration Services

#### Appendix C. Documents and data reviewed

- The library organizational chart
- Records on each staff member and their length of time working at JKPL
- Financial data related to LSTA allotments and expenditures
- The customer satisfaction survey instrument
- Results from the customer satisfaction survey
- Horizon search statistics
- Gate counts
- Wireless usage counts
- Computer usage counts
- JKPL Professional Development Training plan
- Circulation statistics
- Computer training class plan
- Computer training feedback forms
- Completed feedback forms from a 2017 month-long basic computer training class
- Electric and water usage bills
- Library visit/Tour request form

#### Appendix D: Patron satisfaction survey

#### **General Questions**

How often do you visit the library?

- A. At least once a week
- B. Once every three weeks
- C. Once a month
- D. Once every six months
- E. Once a year
- F. Never

If you have not visited the Public Library in the last year, which of the following reasons describes why?

- A. I didn't have time
- B. The library hours were not convenient
- C. I buy books and read them at home
- D. I get all the information I need elsewhere
- E. I get the information I need from the Internet
- F. The library is to far
- G. The library is only for children
- H. In the past I didn't find what I needed
- I. The library would not have what I needed
- J. I don't know where the library is
- K. I don't need a library
- L. It's too difficult for me to get to the library
- M. I don't feel welcome at the library
- N. The service at the library isn't very good
- O. The library is not handicap accessible

What are your main reasons for using the Library (check all that apply)

- A. To borrow best sellers
- B. To borrow other fiction
- C. To borrow non-fiction books
- D. For reference/research
- E. To use the children's library
- F. To use the young adult area
- G. To borrow videos, CD's or audio tapes
- H. To use the copy machine
- I. To read magazines
- J. To read newspapers
- K. To use the Internet
- L. To get information for a school project
- M. To use government publications
- N. To attend storyhour or children's programs
- O. To use the computers (non-Internet)
- P. To get information for home/car repairs
- Q. To get income tax forms
- R. To study/work

On your last visit did you find what you were looking

for?

- A. Yes
- B. No
- C. Partly

Do you usually find the books and other materials that you are looking for in the library?

- A. Always find
- B. Sometimes find
- C. Rarely find
- D. Never find

Mark the reasons that explain why you did not get what you were looking for on your last visit.

- A. Item was checked out
- B. Library had no material on the subject
- C. I could not find the material
- D. Staff could not find the material
- E. The computers were down
- F. The computers were all in use
- G. I do not know how to use the computers
- H. Staff requested material from another library

Mark all the items that describe the service you received

- A. Staff was helpful and pleasant
- B. Staff was too busy to help me
- C. I did not ask for help
- D. Staff did not have the knowledge to help me

How do you find out about what is happening at the library?

- A. Friend
- B. Teacher
- C. Library publications
- D. Library staff members
- E. Local publications
- F. Library web site

Overall, how satisfied are you with library services?

- A. Very dissatisfied
- B. Dissatisfied
- C. Slightly dissatisfied
- D. Slightly satisfied
- E. Satisfied
- F. Very satisfied

Please give us your thoughts on the following areas of service:

Reference Desk

A. Excellent

B. Good

C. Just OK

D. Poor

E. Don't use

Check-out Desk

A. Excellent

B. Good

C. Just OK

D. Poor

E. Don't use

#### **Technology**

Mark all areas in which you would like to see technology improved

A. More computers to access the collection

B. More Internet access

C. More CD-ROM workstations

D. Improved access from home computers

E. Word processing and spreadsheet capability

F. More on-line databases

Please give us your thoughts on the following areas of service:

Availability of Internet Computers

A. Excellent

B. Good

C. Just OK

D. Poor

E. Don't use

Availability of word processing computers

A. Excellent

B. Good

C. Just OK

D. Poor

E. Don't use

How long have you been using the library's online services?

A. Once

B. Less than once a month

C. 1-6 Months

D. 7-12 Months

E. 1-2 Years

F. 3-4 Years

G. More than 4 years

How frequently do you visit the library's website?

A. This is my first visit

B. Daily

C. Several times a week

D. Several times a month

E. About once a month

#### **Community Assessment**

In your opinion, which of the following community services is most beneficial to the community (rank from 1 (the highest) to 6 (lowest))

A. Swimming Pools

B. Parks

C. Arenas

D. Libraries

E. Sports Fields

F. Art galleries/museums

How important is the library as a community service

A. Very important

B. Important

C. Somewhat important

D. Not important

Would you be willing to pay more taxes than you currently do for library services to ensure that library services are maintained and improved?

A. Yes

B. No

What is the best time for you to use the library?

School-year: Mon Tues Wed Thurs Fri Sat

Morning (9-noon) Afternoon (noon-5pm) Evening

(5pm-7pm)

Summer: Mon Tues Wed Thurs Fri Sat

Morning (9-noon) Afternoon (noon-5pm) Evening

(5pm-7pm)

New Building/Building Additions

Mark all the areas in which you think the library can improve

A. More study room

B. More study tables

- C. More study carrels
- D. More meeting rooms
- E. More story hour/ craft space
- F. Larger Building

In a new library, which of the following services would you like to see expanded to better serve the needs of our growing community?

- A. Quite reading space
- B. Computer/Internet stations
- C. Community meeting space
- D. Book selection
- E. Children & Teen activities
- F. Audio-Visual material

Do you support funding for the construction of a new library even if it means a new tax? (for this question you may want to state the amount of the possible new tax)

A. Yes

B. No

#### Collection Development

Mark all area in which you would like to see the collection improved

- A. General non-fiction
- B. Religion/Philosophy
- C. History
- D. Science/Technology
- E. Health/Medical
- F. General Fiction
- G. Mystery
- H. Science Fiction
- I. Romance
- J. Western
- K. Travel
- L. Self Help
- M. Biography
- N. Arts/Culture
- O. Large Print
- P. Audio/Video
- Q. Magazines/Newspapers
- R. Children's materials

Why do you read books?

- A. Pleasure
- B. Business
- C. School
- D. Personal research
- E. Self-improvement
- F. Other

Are current materials useful, up-to-date, and are services satisfactory

- A. Poor
- B. Fair
- C. Average
- D. Good
- E. Excellent

What types of fiction do you like to read?

- A. Action/adventure/westerns
- B. Classics
- C. Children's literature
- D. Young adult fiction
- E. Fantasy/science fiction
- F. Science
- G. Health
- H. Sports
- I. Hobbies
- J. Art

What types of magazines do you like to read?

- A. News/Media
- B. Sports
- C. Hobbies
- D. Science
- E. Health
- F. Children's subjects
- G. Young adult subjects
- H. Women's subjects
- I. Men's subjects

What types of newspapers do you like to read?

- A. Local news
- B. National news
- C. Business news
- D. Foreign news
- E. Sports news

**About Patrons** 

Gender

- A. Male
- B. Female

Your age group

- A. 18-29
- B. 30-39
- C. 40-49
- D. 50-59
- E. 60 or over

Have you completed

- A. 4th grade
- B. 5th grade

- C. 6th grade
- D. 7th grade
- E. 8th grade
- F. 9th grade
- G. 10th grade
- H. 11th grade
- I. High School
- J. Some College
- K. 2 years of college
- L. College Graduate
- M. Postgraduate work (masters or doctorate)

Do you have access to the Internet at home?

A. Yes

B. No

Do you have children in your household?

- A. Under the age of 12
- B. Between the ages of 13-19
- C. No children living at home

#### **Open Ended Questions**

Open ended questions should generally be limited, but if you would like to gather community input from a wide range of experiences you may want to consider asking an open ended question at the conclusion of your survey.

#### Other Comments:

Please list any additions you feel the library could make to its collection of materials and services.

Please report any changes you feel the library should make in its service to the community.

How does the library not meet your expectations?

What do you like best about the library?

## Appendix E: Sample computer training data collection

Please check mark what was covered and applied.

Internet Tools
<ul> <li>Understanding what is an Internet Browser or 'Browser'</li> <li>I know if a Website is supposed to be secure.</li> <li>Interacting with the Browser Tools</li> <li>Interacting with a Website</li> <li>Using Tabs</li> </ul>
File Saving
<ul> <li>□ I understand what a file extension is</li> <li>□ I know where I save a File</li> <li>□ I can find what I downloaded</li> </ul>
Introduction to Word Processing
<ul> <li>□ I understand what margins are</li> <li>□ I understand what alignments are in Word Processing</li> </ul>
Do you feel confident using the internet for personal and private business? Example: registering for a service or application that asks for sensitive information.
If yes, explain why.
Have you ever bought something online?
If yes, was it convenient for you and why?

#### Appendix F: Charts and tables

Table 3. How would you rate each of the following library services?

	Survey #1: percent responding "excellent"	Survey #2: percent responding "excellent"
E-books	37%	22%
Computers and printers	39%	46%
Internet access/wifi	46%	48%
Online services (website, catalog, research databases)	31%	42%

Table 4. Reason for visiting the library

	Survey #1: percent responding "excellent"	Survey #2: percent responding "excellent"
E-books	6%	18%
Computers and printers	30%	28%
Internet access/wifi	39%	60%
Online services (website, catalog, research databases)	10%	48%

